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Moving from atheoretical to theoretical approaches to interprofessional client-centred collaborative practice

In this chapter we revisit the importance of theory in the development of inter professional client centred education and practice (IPCEP). We focus specifically on the theoretical underpinnings and development of a workshop model aimed at moving inter professional practitioners from atheoretical to the theoretical practice.

Theory is a set of propositions/hypotheses linked by a rational argument (Jary & Jary 1995). Theory has a central role for us as practitioners, guiding us when we engage with new health and social care practices. Theory can help us articulate, reflect and potentially reinterpret our existing/habitual practices. As humans we are natural theorists, using lay theory to anticipate and rationalise our everyday activity.

However as practitioners we often do not have the time or habit of stopping to reflect on and make explicit our theory: the mechanisms by which our actions are expected to have an effect (Pawson & Tilley 2004). We may have developed negative attitudes to theory, seeing it as the antithesis of constructive practice activity. Alternatively we may see popular theories used in the IPCECP world as either overly reductionist or incomprehensible and complicated. But a failure to make explicit the theory behind what we are doing is at worst, tantamount to malpractice (Eraut 2003). At best we miss an opportunity to use theory as a tool with which to engage in second-order reflection in which we can stand outside of ourselves looking in on our daily practices with a critical eye (Wackerhausen 2009); an informed guide for our future actions to help find solutions, or to be held accountable for our actions.

IPE in the past has been lamented as lacking a evidence-based theoretical foundation (Barr et al. 2005); (Craddock et al. 2013)(Clarke 2006)(Freeth et al. 2002; Hean et al. 2009). Clifton *et al.* (2007) for example, found that only 50% of the studies they selected in a review of the inter professional education literature had mentioned explicitly the use of an educational theory and Cooper et al. (2001) recommended the importance of including outcome measures in evaluations that have reference to a theoretical model.

However, over that past 10 years, the IPCEP community have risen to the challenge. They have counteracted the shortfall of IPCEP theory through searching other disciplines for theories that may have utility in the field (Hean, Craddock & Hammick 2012; Helme, Jones & Colyer 2005);(Kitto et al. 2011). The development of the IN-2- theory community of practice and the special edition on theory in the *Journal of interprofessional Care (*January 2013) reflect the commitment to this area.

IN-2-THEORY developed from a series of workshops funded by the UK Economics and Social Research Council (2007–2009). This brought together theory-interested individuals within the IPCEP field to work together raising the profile of theory within interprofessional research, policy and collaborative practice(Hean et al. 2013). The workshops developed strong working relationships with international colleagues, relationships which led to the development of the IN-2-THEORY community (http://www.facebook.com/groups/IN2THEORY/). Since its inception in 2010, members of IN-2-THEORY have published together on theoretical issues, been awarded research funds, delivered workshops on the use of theory in curriculum development and are currently engaged in a scoping review of theory (Hean et al. 2012). These collaborations are gaining impetus and membership is growing. Activities have developed the relationships required to collaborate better in the future and we learn together of different theories and how these may be applied (Hean et al., 2013).

The increased interest in theory has resulted in an abundance of theories on 'offer' to inter professional clinicians, curriculum developers and researchers. The number and variety of these has raised concerns that these may muddy, rather than clarify, the ways in which theory may contribute to the development of IPCEP. There is some appeal in identifying a single theoretical approach for consistency and clarity. The Institute of Medicine (IOM 2015) for example have brought together a useful conceptual model capturing the many dimensions of Interprofessional Education (IPE), with the aim of achieving some consistency in terminology and the links between health and education systems. However, the theories that underpin the relations between these dimensions are less easily synthesised into a single entity. In fact the identification of a single theory, capable of explaining all dimensions of IPE, remains elusive and perhaps undesirable in such a complex field, where different groups of learners meet for a variety of purposes and at different stages of their professional development (Barr *et al.*, 2005; Hean *et al.*, 2009b). A 'tool box approach' to theory application is more useful (Hean et al. 2009). Theories drawn from a number of academic disciplines, including sociology, psychology, education and management are available in the tool box. The key is to select a theory for its ability to articulate or improve understanding of a specific dimension of IPCEP in a particular

context. Prioritisation of a single theory is again inappropriate as individual theory users have different preferences and familiarity with different theories, dependent on their own unique professional and academic histories. Neither are theories mutually exclusive and an overlap between a number of theories exists (Hean *et al.*, 2009).

It can also be argued that what is now more important in the field is a focus on the *use* rather than the identification of the single most relevant theory. We therefore devote the rest of this chapter to a discussion of theoretical competence and the development of a workshop model designed to develop these competencies. This workshop model developed from the joint activity of In-2- Theory members.

The workshop model developed iteratively from the initial set of workshops funded by the UK Economics and Social research Council (2007-2009) and a CIHR grant (2014). The model has been piloted and developed through a series of iterative presentations and workshops at *Collaborating across Borders (*CAB) and *Altogether Better Health* (ABTH) conferences from 2010 to 2015. The workshop model has also been trialed with PhD students in a Norwegian national doctoral research training programme (PROFRES, 2014).

The aim of the workshops was to encourage IPCEP practitioners to use theory to reflect critically on their practice and problem solve within their real life experiences. The workshop provides a forum with which participants can develop and explore meaning of theoretical competencies. Participants are expected to improve their understanding of how theory relates to their practical experiences, be able to identify some relevant theories applicable to this and apply relevant theory to come up with innovative solutions to practice problems.

Participants are described as practitioners but In this chapter we will use practitioners to refer to a wider range of stakeholders: clinical practitioners, educators as well as researchers, as all of these roles require an engagement with theory to underpin their activity. For example, for the clinic practitioner, theory might underpin the strategies they employ to work with other professionals in their work team or transfer information from one organisation to another. For educators, theories on how learning takes place can underpin the learning activity developed in an inter professional education programme and for researchers, theory should underpin the variables selected for measurement in the evaluation of a interprofessional collaboration or inter professional educational programme.

Cocreation

The workshop has the concept of cocreation as its underpinning. Cocreation is the creation of outputs that have added public value and are the result of positive joint activity between two or more actors (Alford 2009) There is an element of interdependence in cocreation relationships, and the added value should outweigh the resource (time, human, financial etc.) required to engage in the cocreation process (Alford, 2009).

The theorist and the practitioner are the two actors brought together in the workshop to concrete new solutions to practice based problems in inter professional education or collaborative practice. Their knowledge is interdependent as the theorist cannot develop and test their theory without practice based knowledge to which to apply and test this knowledge and the practitioner needs theory as a tool to guide and rationalise their actions.

Carlile (2004) describes the cocreation process in terms of knowledge passing across three boundaries: first knowledge must transfer between the theorist and practitioner. Second, transfer of knowledge alone, didactically, is not enough and knowledge must be then be translated into a commonly understood language. Finally, transformation of knowledge is required. Transformation of knowledge occurs when political differences are put aside and the theorist knowledge merges with practitioner knowledge to form a new perspective on the practice problem at hand. This transformation is reminiscent of Mezirow's description of transformational learning (Mezirow 1997). For Bernsein (Bernstein 1971; Hammick & M. 1998) crossing this final barrier allows for the two very different domains of practitioner and theorist knowledge to overlap to form a new and interdisciplinary region of knowledge where innovation solutions, not attainable by either party alone, are found.

The workshop attempts to mirror this transfer, translation, transformation process, by bringing both parties together to exchange knowledge and cocreate a new narrative of the practice context seen through a theoretical lens (see Figure 1). It also seeks to impart theoretical competence to participants so they will be able to transfer their learning from the workshop back to their own practice. The workshop achieves this in four main phases:

◆presentation of theorists knowledge, (transfer and translation)

◆presentation of practitioners knowledge (Transfer and translation)

◆cocreation of innovative solutions to practice problems using theory as a tool (translation and transformation)

◆Presentation of theoretical underpinnings of workshop (highlighting theoretical quality and competence)

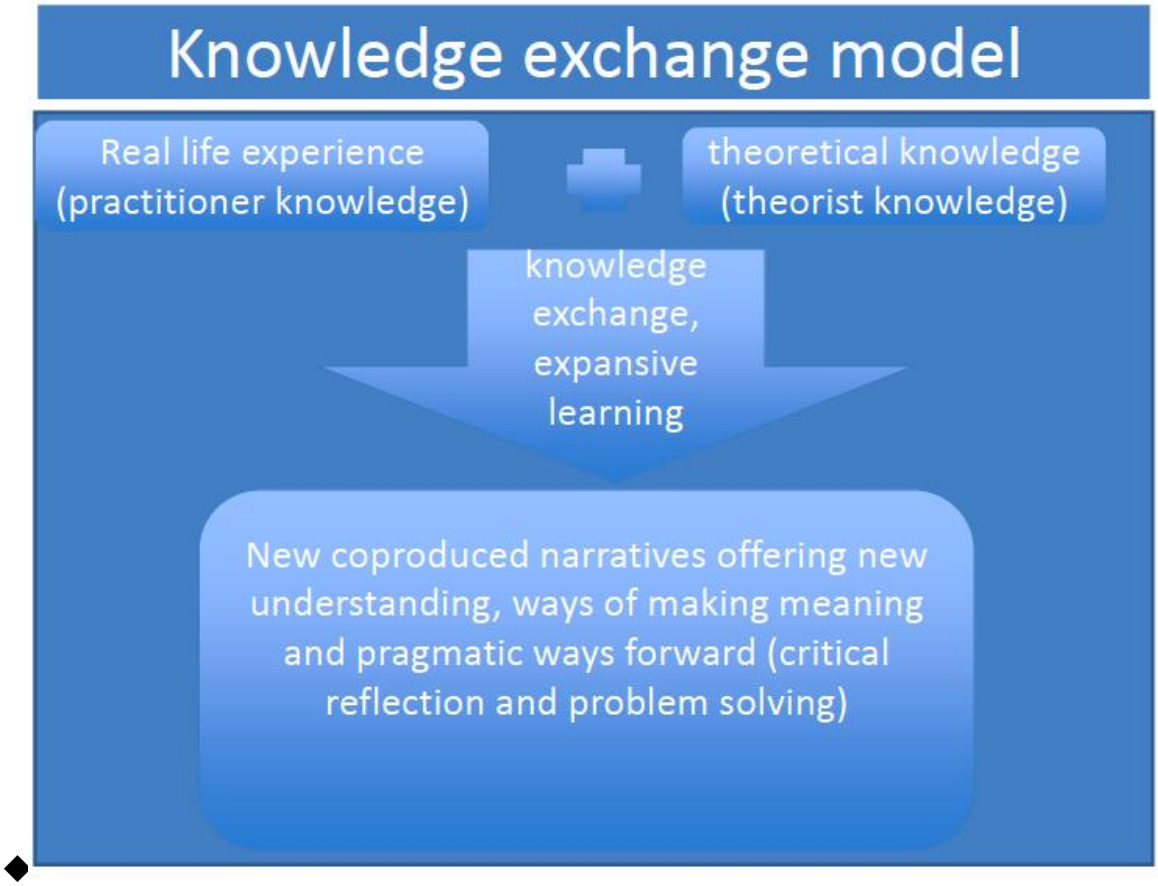

Figure 1: Overlap of practitioner and theorist knowledge to encourage critical reflection and problem solving.

Practitioners' knowledge: the use of narrative

A narrative or story is the way we as humans arrange our experiences and make meaning of them. Humans are natural story tellers. The narrative is both a form of knowledge (the knowledge of the practitioner) as well as a boundary object (Carlile, 2004) that facilitates the translation of the practitioners' professional knowledge into common knowledge, that can be understood by the theorist.

Two approaches have been used to create this narrative. The first involves getting practitioners to tell their story to the group for exploration. Box 1 illustrates some of the prompts used to extract a rich story. The advantage of participants developing their own narrative is the direct relevance of the story to their own experience making them more likely to engage with the transformation process. The disadvantage is that it is logistically difficult to get around to everyone's story in workshop groupwork and the story of the most dominant individual may take precedence. Further, stories are often personal, revealing potentially vulnerable elements of the individual storyteller's character or history. The interpretation of the story through theory by fellow participants exposes the participant to potentially damaging reflections on the story and its meaning.

BOX 1 Illustration of questions used to extract a relevant narrative pre workshop or during workshop proceedings

*TELL ME ABOUT YOUR EXPERIENCE OF WORKING IN AN INTERPROFESSIONAL TEAM?
*THINK OF A SPECIFIC EVENT IN WHICH TEAM WORKING MAY OR MAY NOT HAVE WORKED WELL.
*HOW WERE THINGS BEFORE THIS EVENT?
*DESCRIBE WHAT HAPPENED?
*TELL ME ABOUT THE PEOPLE INVOLVED
*HOW DID THIS MAKE YOU FEEL?

*WHAT VALUES OF YOURS ARE REALISED IN THIS STORY?
*CHOOSE ANOTHER PROFESSIONAL WORKING IN THE TEAM. HOW DO YOU THINK THEY MIGHT HAVE TOLD THE STORY OF THIS EVENT?
*HOW MIGHT WE RETELL THE STORY DIFFERENTLY FOR A DIFFERENT OUTCOME?

*COME UP WITH TWO THINGS YOU MIGHT DO DIFFERENTLY AND WHY?

Participants are alternatively provided with a range of pre-prepared stories representing experiences of different stakeholders in IPCEP. Participants, in small group work, must chose one narrative for further analysis. The story chosen may not always be relevant for all participants, however, so its is worth having a range of stories available for theory application (experiences of the IPE curriculum developer, clinician, facilitator/preceptor, student, patient or researcher) and allowing participants to choose which is relevant to them.

Theorists knowledge

This transfer of theorist knowledge happens in a brief three minute sell, poster presentation or reading of summary sheets developed and presented by facilitators in the workshop. Participants are provided with some relevant theories that have potential application to the narratives provided. Participants then discuss the theories with the facilitator in small group work for clarification where required.

These facilitators are individuals deemed to have particular theoretical expertise, although often they will have a dual identity as practitioners also. As such they are act as boundary objects also (Walker and Narcaro ref) in their ability to help the translation of theoretical knowledge into a format understandable by the practitioner.

Theory is presented as a tool to help the practitioner, alongside the theorist reflect on the practice problem or story. It enables them to makes alternative meanings of the same experience/story and potentially alter its trajectory. Box 3 illustrates this by showing that two different theories can provide very different interpretations of the same story. Both theories need to be tested objectively. The problem with the example in Box 3, of course, is that one of the stories is essentially true and the other is not-they are mutually exclusive. This is not the case in the application of theory within IPCEP however as theories are essentially different lenses bringing into focus different elements of the same problem. One approach is not necessarily more or less useful than the other.

BOX 3: Narrative being interpreted differently through two separate theories
Story: (courtesy of Clive Baldwin), St Thomas University, Canada

Women comes into a hospital with a sick child.
Patient notes indicate this is the fourth admission.
The diagnosis of the child's condition is unclear.

What happened next?

Theory 1:
Proposition 1: the child has a complex condition.
Proposition 2: Health professional has not yet identified the condition accurately.

Response: We need to run tests in order that the health professional can identify and treat the condition

Theory 2:
Proposition 1: the mother suffer suffers from Munchausen by Proxy.
Proposition 2: The child is ill because of the mother's condition.

Response: Engage social services to support family, mother and child.

Participants are presented with theories from sociology, psychology, organisational theory and education, representing micro and macro levels of analysis. BOX 4 summarises some of the theories used in current workshops. The selection of theories is based largely on their current application to the IPCEP world but also on the familiarity of facilitators with these particular

frameworks. The list of course is not exhaustive so participants are encouraged to use any theory they are more familiar with if they see that it has application as long as they are able to clearly articulate this to fellow participants. Some participants find the long list of theories in BOX 4 confusing and time consuming to read in a single workshop and facilitators may chose to select only two or three on the list. The idea is not to state these are the only theories with utility in IPCEP but to develop participants' skills in selecting theories and applying these to different levels of the narrative. Facilitators emphasise that theory selection has some subjectivity as the theory is often chosen based on the theorists own history and familiarity and that this means that the story will be told differently, dependent on theory chosen.

BOX 4: Summary of some of the theories applied.

Theories from Sociology that explain how people behave in groups *Many of these theories relate to relationships; these maybe between practitioners and those they care for, or between practitioners such as relationships in teams, others consider power relationships in practice.*		
Theory	**Brief explanation**	**Reference**
Group membership: **Social Identity Theory**	The theory states that we take our identity from our membership of social groups *e.g.* your school class, your football club and in healthcare your profession. In being a member of a social group we prefer to have a positive rather than a negative identity for this group. We therefore value and perceive the group to which we belong highly; this group is referred to as our 'in-group'. We perceive other groups to which we do not belong less favourably and these are referred to as our, 'out-group'. In-group bias can affect how we chose to allocate resources, in that we normally always favour our in-group.	Tajfel, H. & Turner, JC. (1986). The Social Identity theory of intergroup behaviour: In: Worsgel W. & Austin W. Psychology of Intergroup Relations. Chicago: Nelson-Hall Tajfel, H. (1981). *Human groups and Social Categories.* Cambridge University Press. Turner, J. (1999). Some current issues in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B., Doosjie (Eds.), *Social Identity* (pp. 6-64). Oxford: Blackwell.
Rewards of group membership: **Social Capital**	In sociology there are many theories which look at social networks of groups. This theory looks at the value of human relationships in groups. Professional groups in health care consider medicine;	Bourdieu, P. (1997). The forms of Capital: In A.H. Hasley, H. Lauder, P. Brown. & A. Stuart Wells (Eds.), *Education: Culture, economy and society, (pp 46-58). Oxford*

	amass many advantages from being in that group- this capital is normally reinvested in the group. Advantages of joining this social group are awarded only to those who can join the group. Members of any group also bring human capital from other networks and groups. Interprofessional groups should re-align their social capital for the benefit of all! Social capital is the accumulative advantage gained from being part of a social network. It is used to understand the benefits (sometimes unequally distributed) gained by members of the group; It focuses on the value of building sustainable relationships (bonding and bridging) and how to achieve this. It helps us think about norms/rules, network characteristics, internal and external resources and trust necessary to build beneficial relationship.	*University Press.*
Power and hierarchy **Expectation States Theory**	When members of the group, for whatever reason, anticipate that a specific individual will make more valuable contributions, they defer more to this individual and give her/ him more opportunities to participate. These implicit, often unconscious, anticipations of the relative quality of individual members' future performance at the focal task are referred to as performance expectation states. Once developed, performance expectation states shape behavior in a self-fulfilling fashion. The greater the performance expectation of one actor compared to another, the more likely the first actor	Ridgeway, C.L. (2006). Status construction theory. In Burke, P.J. (Ed.). Contemporary social psychological theories (pp. 301-323). Stanford, CA: Stanford University press. Ridgeway, C. L. (2001). Gender, status and leadership. J of Social Issues, 57, 637- 655; Ridgeway, C.L. (2011). Framed by gender. Oxford University Press. S. J. Correll & L. Ridgeway. (2006). Expectation states theory [chapter]. In Handbook of Social Psychology, First Edition, pp. 29-51. Springer. Berger, J. & Webster, M. Jr.

	will be given chances to perform in the group, the more likely she or he will be to speak up and offer task suggestions, the more likely her or his suggestions will be positively evaluated and the less likely she or he will be to be influenced when there are disagreements. The actor with the lower performance expectations, by contrast, will be given fewer opportunities to perform, will speak less and in a more hesitant fashion, will frequently have his or her contributions ignored or poorly evaluated, and will be more influenced when disagreements occur. In this way, relative performance expectations create and maintain a hierarchy of participation, evaluation, and influence.	Expectations, status and behavior. In Burke, P.J. (Ed.). Contemporary social psychological theories (pp. 268-300). Stanford, CA: Stanford University press.
Others: i) Freidson, E. (1970) On the **power of professions** such as medicine; ii) Parson, Y. (1951). **The social system**; iii) Goffman (1963) and Strauss (1978) interactionist theorists looking at role negotiation.		

Recommended text: Kitto, S., Chester, J., Thistlethwaite, J. & Reeves, S. (2011). *Sociology of Interprofessional Health Care and Practice. Critical Reflections and Concrete Solutions.* New York: NOVA.

Theories from Psychology that explain individual behaviour in groups

Many of these theories relate to how we form our attitudes and how our personality impacts on our behaviour in groups. One branch of psychology is social-psychology bringing together research on key aspects of the individual linked to groups.

Theory	Brief explanation	Reference
Attitude Change **Contact Hypothesis**	In work centred around considering why people feel hostile to one another and literally cannot like on another or agree, Allport in 1954 proposed that where people with differences are brought together, in contact with one another, these negative perceptions are eroded. Often used as a reason for IPE, Hewstone *et al,* have considered the requirements in addition to just contact that	Allport, G.W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley. Hewstone, M. Brown, RJ (1986). Contact is not enough: an intergroup perspective on the

	might enable different professional groups to perceive each other favourably. Allport looked at the origins of intergroup prejudice and produced a series of influential policy recommendations. He proposed that the best way to reduce hostility between groups was to bring them together (as is proposed in IPE). However, he argued that this contact alone was not enough for positive attitude change. He, therefore, qualified his hypothesis with a number of conditions that he believed were important to the reduction of negative intergroup attitudes and stereotypes. These conditions included that each group in the contact situation should have equal status, experience a cooperative atmosphere, be working on common goals, have the support of the authorities (institutional support), be made aware of group similarities and differences, have positive expectations and that the members of the conflicting groups perceive each other as typical members of their group	'contact hypothesis': In Hewstone, M. &Brown, RJ. *Contact and conflict in Intergroup Encounters.* Oxford: Blackwell, 1986. Hean, S, Dickinson, C, S., H & C., D 2005, "The Contact Hypothesis: an exploration of its further potential in interprofessional education.," *Journal Of Interprofessional Care*, vol. 19, no. 5, pp. 480–491
Personality **Myers Briggs Inventory**	Myers Briggs type indicator uses Jung's psychological type theory and measures differences between people in the way they prefer to focus their attention and energy; the way they prefer to take in information; the way they prefer to make decisions; and how they orientate themselves to the outside world. According to the theory everyone has a natural preference for one of the opposites on each domain on each of the four dimensions. The theory explores our strengths and blind spots	Myers, Isabel Briggs with Peter B. Myers (1980, 1995). *Gifts Differing: Understanding Personality Type*. Mountain View, CA: Davies-Black Publishing. ISBN 0-89106-074-X. Check date values in: |date= (help)
Others: i) **Self-efficacy**: self-belief: Bandura, A. (1988). Organizational Application of Social Cognitive Theory. Australian Journal of Management, 13(2), 275-302 - ii) **Cognitive Dissonance** theory; on attitude change- Festinger, L. (1957). A theory of cognitive dissonance.		

Stanford, CA:Stanford University Press

Learning Theories which explain how learning takes place in groups

Learning theories focus on how the individual makes meaning or how meaning is made through social interactions- as such draws upon social and psychological theories

Theory	Brief explanation	Reference
Constructivists theories **Experiential learning**	For Kolb (1984) learning is seen as a continuous process grounded in experience. The learner completes a cycle of learning in which experiences is unpacked through reflection analysis and the creation of new understandings. Each step in the cycle is important in building new cognitive understandings. This learning maps to all learning styles and can be socially mediated.	Kolb, DA. *Experiential Learning* (1984). Prentice-Hall, Englewood Cliffs, New Jersey.
Social Constructivists **Zone of Proximal Development**	For these theorists learning is not just about building new understandings of Schema it is about how meaning is constructed through social engagement. New meaning emerges through collaborative learning. Vygotsky talks about a zone or proximal development where learning is enabled because they learn with others and this takes them beyond and into a new realm of learning.	Vygotsky L (1978). Mind in Society. Harvard: University Press Cambridge.
Others: **Transformative learning** ; **ii) Illeris Tension Triangle**;		

Text: Hean *et al* (2009). Learning theories and interprofessional education: A user's guide. *Learning in Health and Social Care,* 8(4), 250-262.

Organisational Theories that explain the way people work together in healthcare

The systems where people work maybe healthcare organisations or educational institutions

Theory	Brief explanation	Reference
Activity Theory	With its roots in social science this theory considers a framework for considering activities that take place in complex systems. In any work system there are goals, modes of working such as divisions of labour, rules, aims and intended outcomes. Consider when different these	(Engeström 2001)

	systems collide or come together e.g. a nursing school coming together with a medical school to agree an IPE curriculum. There will no doubt be unresolved priorities, contradictions that emerge as they try to work together; this theory helps to unpack issues of non-alignment	
Complex Adaptive Systems	Many of these theories have their routes in maths. The main aspects of a complex adaptive system consider how many elements interact with each other. These interactions rich in energy and recurrent have feedback loops and as a result of these and other elements behaviour in a system cannot be predicted. Orderly patterns are aspirational in these systems.	Cilliers,P. (1998). Complexity and Postmodernism. London: Routledge

Outcome Frameworks

Competency frameworks are not strictly speaking a theory. However they are a structured organised way of structuring our thought processes and providing a rationale for action.

Theory	Brief explanation	Reference
Collaborative competencies frameworks	Competence—what individuals know or are able to do in terms of knowledge, skills, attitude Capability—extent to which individuals can adapt to change, generate new knowledge, and continue to improve their performance (Fraser ad Greenhalgh, 2001, p799) • ¥Role clarification/ Roles/Responsibilities for collaborative practice • ¥Team functioning/ Interprofessional teamwork and team-based care • ¥Person/Family/Community Centred Care • ¥Collaborative leadership • ¥Interprofessional communication • ¥Interprofessional Conflict resolution	Fraser, S. and Greenhalgh, T. (2001) Coping with complexity: educating for capability, British Medical Journal, 323(7316) pp 799–803 Interprofessional Education Collaborative Expert Panel 2011, Core Competencies for Interprofessional Collaborative Practice, Washington

	• ¥Values/ethics for interprofessional practice	D.C. : Interprofessional Education Collaborative. Orchard, CA & Bainbridge, LA 2010, A National Interprofessional Competency Framework, Canadian Interprofessional Health Collaborative, Vancouver. Walsh, CL, Gordon, MF, Marshall, M, Wilson, F & Hunt, T 2005, “Interprofessional capability: a developing framework for interprofessional education.,” Nurse Education in Practice, vol. 5, no. 4, , pp. 230–237. Wilhelmsson, M, Pelling, S, Uhlin, L, Lars, OD, Faresj, T & Forslund, K 2012, “How to think about interprofessional competence: A metacognitive model.,” Journal of Interprofessional

		Care, vol. 26, no. 2, <sup>1, ,, pp. 85–91
Others	Kirkpatrick framework of educational outcomes (see Freeth, D, Hammick, M, Koppel, I, Reeves, S & Barr, H 2002, *Occasional Paper No . 2 October 2002 A Critical Review of Evaluations of Interprofessional Education*, LTSN-., London).	

Lay theories Your common sense way of understanding the world around you.		
Theory	**Brief explanation**	**Reference**
Lay theory	The use of theory is not simply an academic exercise. As humans, we constantly formulate theories that later underpin our actions even at the simplest of levels. To cross a road in our local community, for example, we put together a range of propositions: a car may approach from the right; it is likely that a car may also come from the left. If one looks left and right, the approach of car will be observed early enough to take avoiding action. We test out these hypotheses, each time we cross the road and find that in most cases these prove true. The 'look left look right theory' then allow us to transfer our experiences of local roads to new contexts, e.g. a road in the busy city centre	Hean, S, Craddock, D, Hammick, M (2012) Theoretical insights into interprofessional education: AMEE Guide No. 62.," *Medical teacher*, vol. 34, no. 2, pp. e78–101

Cocreation of innovative solutions to practice problems using theory as a tool

In small groups, participants agree as a table on one story to explore further, a story that has most relevance to them. They read the narrative in greater depth discussing their first impressions, whether they can identify the structure or different levels within the story. Practitioners and theorists then work together to reinterpret practitioner narratives through the chosen theoretical lens applied at any one of these levels. Facilitators highlight the relationship between the structure of narrative and theory: narratives being presented as multi layered (see

Box 5) and that theory can be applied to any one of these different levels to make different meanings of a single experience or story (see Box 3).

BOX 5: illustration given at workshop representing multilevel of narrative and multi levels at which theory can be applied

Narrative

The elated Girl Scout went home: her mother proud of her for having sold all of her boxes of cookies: those inescapable icons of capitalism, its methods and assumptions hardwiring our children to value the power of selling in almost their every activity; methods and assumptions championed by some and resisted by others (Adapted from Landon, 2008).

Theory can be applied at different levels

Cognition: Girl Scout's emotional state

Social development: mother and child relationship

Society: Capitalism

The group reviews the theory knowledge presented and as a group select a theory and relevant theory for further analysis. They can use their own theory or a lay theory if preferred, as the exercise is about theoretical skill rather than knowledge of any one theory per se.

Choosing a relevant theory and coming up with an innovative solution to the practice problem addressed in the narrative as seen through the new eye of the chosen theory, requires more than just common understanding of each other's knowledge base. It requires reaching a compromise between the political interests of both parties (Carlile, 2004)(the story of the dominant participant taking precedence is one example of this and the perceived status of theoretical or practice knowledge over the other is another).

Using the template they reinterpret the story using the chosen theoretical lens. Participants are given a worked example of the application of a theory to the interpretations of a given narrative. They then turn to a similar exercise with their chosen narratives using a series of trigger questions in a provided template. The template guides them into them into considering the focus brought to the story by the theory chosen, how they have seen this story differently and what new meaning has this exercise brought to their understanding of this story. They are then asked to produce two questions or hypotheses or statements that represents the new meaning for them that they now make of the story when doing this exercise. A second theory may be chosen and an alternative interpretation developed. Participants then compare the two interpretations of the narrative to observe how two separate theories lead to different

interpretations.

Theoretical quality and competence

Throughout the workshop, we attempt to role model dimensions of theoretical quality and make explicit the theoretical competencies being learnt. The concept of theoretical quality in the IPCEP) field is discussed in greater detail elsewhere. But in brief, theoretical quality in education, clinical and research practice is achieved if theoretical underpinnings of our practice have been effectively articulated, operationalised and/or tested within the intervention design, delivery and assessment of outcome. The concept of theoretical quality mirrors the assessment of methodology quality used in systematic and similar literature reviews (BEME Collaboration 2012)(CASP 2012). The dimensions of theoretical quality in IPE originate from criteria developed by Fawcett and Downes (Fawcett 2005, 2003; Fawcett & Downs 1992) namely parsimony, pragmatic adequacy, testability, operational and empirical adequacy.

Parsimony

For effective knowledge exchange between the theorist and practitioner, theories must be expressed in as economic a way as possible, clearly and concisely, minimising the number of concepts and propositions that make them up. In the workshop model, we operationalise this dimension in three ways:

- the quick sell where the theorist is challenged to present oral a summary of their theory of choice in a three minute sell. This forces them to prioritise the essence of the theory in as clear and understandable a way as possible.
- poster presentations displayed on the walls of the workshop venue and in which diagrammatic representations of the theory are encouraged.
- The development of crib sheets (see Box 4), that bring together brief one paragraph summaries of each theory.

Evaluations of these resources have been positive, some participants indicating this was the first time a particular theory had made sense to them. However, we still have some way to go, as for some the written representations were still difficult to understand, especially by second language speakers.

During the workshop presentation we explain the logic behind the three minute sell, poster and crib sheets to give participants insight into the importance and skill required in making a theory clear in a minimum of times and space. This skill is something they will need to replicate when

reporting and publishing their own practice in word limited book and journal article.

Testability

To address this practitioners must ask themselves if, in applying theory to their practice, clear research questions, propositions and/or hypotheses have been developed from the theory.

In the workshop we operationalise this in two ways. First, in the poster representations we ask facilitators to provide exemplar hypotheses or questions to demonstrate how the theory can be tested in practice. Similarly, participants are asked to come up with their own hypotheses, statements, questions (guided by a workshop template) and showing how these have been derived from a particular theory.

Operational Adequacy

This criterion is fulfilled if appropriate methods are used to test the propositions or questions created. So for example, if social capital theory (see box 4) is applied to a story pertaining in small group work in an IPE curriculum module then the propositions developed might relate to the quality and sustainability of relationships formed between students of different professionals during interprofessional education. To test this, a qualitative approach could be chosen with the researcher using focus groups or interviews, a week and then a year after the module has completed to explore with participants the quality and sustainability of the relationships they formed during the module and, include in their interview schedule questions such as “In your student group how would you describe the relationships with students from the same profession and with students from other professions? How did these relationship impact on your experience of the module? What did you learn from each other? What happened after the Module? Did you see the members of your group again?

Empirical Adequacy

This is achieved if the empirical data collected during he testing of the theory/propositions, prove the theory to be correct. This means that the research data collected is congruent with the theory that underpins the study.

To date operational and empirical adequacy are dimensions hat have ot yet been introduced into the workshops as yet. This is largely due to the time restrictions put on the workshop length to date. There is scope however, to arrange a series of workshops where participants develop hypotheses in initial workshops, reenter practice to operationalize these and come back in subsequent events to discuss their findings and the empirical adequacy of their chosen

theories.

Pragmatic Adequacy

For a theory to have pragmatic adequacy it must be used in practice or, at the very least, its potential use in practice must be made obvious. By practice we mean the theory must have an obvious application to the IPCEP practice context. We stress in the workshop therefore that the use of theory cannot be an academic exercise, theory for theory's sake. It must have utility. Pragmatic adequacy is achieved if all other dimensions of theoretical quality are obtained

The workshop model is designed to make participants aware of the meaning of theoretical quality and how to achieve this. As such it provides a forum with which participants can develop theoretical competence. Competence is defined as *what individuals know or are able to do in terms of knowledge, skills, attitude…* (Fraser & Greenhalgh 2001, p799). The workshops aim to increase participants' knowledge of a range of relevant theoretical frameworks, improve their skills to work with theorists and apply theory to their practice and for them to develop a positive attitude towards theory and its utility. In other words, to overcome the antipathy that is often associated with engagement in theoretical discussions.

From our experiences with the theory workshops, and in combination with the concepts of theoretical quality above, we conclude that theoretical competencies should include the ability to:

- understand that social meaning of an experience is transformed depending on the theory being applied.
- Understand that stories have multiple levels and theories can be applied to each of these.
- Select and apply a relevant theory to a range of experiences.
- Use theory as a reflective tool to either resolve or advance thinking on a range of IPCEP experiences.
- Articulate theory in an accessible manner tailored for the receiving audience
- Choose and apply a range of theoretical constructs to a range of different contexts to make alternative meaning of a single experience and hence to aid reflection and decision making in one's IPCEP practice
- Understand the importance of theory to rigorous research and practice
- Use or develop theory to explain why IPCEP is expected to work and in what context (see Pawson and Tilley, 2004)
- Articulate the characteristic of the theory chosen, its origins/history (e.g. sociology /psychology) and these historical slants this brings to the narrative

Concluding thoughts

In this chapter, we have outlined the importance of theory to the field of IPCEP and have presented a workshop model through which theoretical competence in the IPECP community can be developed. The model is a work in progress however. For example, clinical and policy maker knowledge has been largely missing in workshops to date and efforts should be made to encourage practitioners and policy makers to engage in these workshops.

The workshops help participants come up with new way of looking at their practice problems and potential hypotheses. These need to be tested and the workshop model may develop into a series of workshops in which participants return in subsequent events to be supported and report back on their hypothesis testing in intervening practice periods.

To date our workshops have also focused very much on the deductive use of theory. The justification is that there is plethora of sociological and psychological theories explaining human relationships and that reinventing the wheel is not required. However there is space for an inductive approach and fostering quality grounded theory to develop theory specific to the IPECP context.

Rigourous evaluation of the model is required that goes beyond the limited surveys that are conducted at the end of each iteration of the workshop model. These evaluations should particularly explore the question and transferability of theoretical competencies by workshop participants back into their practice settings and hence the development of theoretical capability (Fraser and Greenhalgh, 2001).

It now remains for us to challenge theory enthusiasts both within and out of the In-2- Theory community address some of the above, to replicate and develop the model in their own areas of theoretical and practice expertise.

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