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**The formation of professional identity in medical students:
Considerations for educators**

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ABSTRACT CONTEXT

Medical education is about more than acquiring appropriate levels of knowledge and developing relevant skills. To practice medicine students need to develop a professional identity - ways of being and relating in professional contexts.

OBJECTIVES

This paper conceptualises the processes underlying the formation and maintenance of medical students' professional identity drawing on concepts from social psychology.

IMPLICATIONS

A multi-dimensional model of identity and identity formation, along with the concepts of identity capital and multiple identities, are presented. The implications for educators are discussed.

CONCLUSIONS

Identity is multiple, dynamic, relational, situated, embedded in relations of power, yet negotiable.

Students' professional identity formation is most influenced by the informal and hidden curricula.

Interaction with appropriate role models; opportunities to experiment and receive feedback on provisional identities; and be provided with the paedagogical space to understand and synergise their developing identities, is recommended.

The profession must be proactive identifying suitable role models and integrating students into the various social networks existing within medical schools.

The profession, including students, needs to reflect on the institutionalised norms and conventions that influence student's behaviours.

Helping students form, and successfully integrate their professional selves into their multiple identities, is a fundamental of medical education.

INTRODUCTION

Medical education is about more than acquiring an appropriate level of knowledge and developing relevant skills. To practice medicine students need to develop a professional identity i.e. ways of being and relating in professional contexts. Identity is realised through a dynamic process of identification by which individuals classify their place in the world as both individuals and members of collectives. It develops in interactional relationships during which individuals may be influenced more by the categorisations of others than her/his own cognitions and emotions (Ashmore et al, 2004). Medical students' important interactions occur in social institutions with established practices such as universities, hospitals, hospices, community care organizations etc. During this process they identify not only who they are, but also who they are not (Jenkins, 2008).

The conceptualisation of identity as a sole, distinct, fixed entity has moved to a dynamic conception of multiple identities (Shotter and Gergen, 1994) situated in social relationships (Eisenberg, 2001, Gergen, 1991, Gergen and Davis, 1985). Students' identities are not fixed, but are in a constant process of transformation as they go through life. The ways in which medical students form their professional identity, and subsequently conceptualise their multiple identities, has implications for their future well-being and relationships (Monrouxe, 2009).

This paper conceptualises the processes underlying the formation and maintenance of medical students' professional identity, drawing on concepts from social psychology and applying them to the context of undergraduate medical education. The implications for medical educators are then discussed.

A MULTI-DIMENSIONAL MODEL OF IDENTITY AND IDENTITY FORMATION

The Personality and Social Structure Perspective (PSSP) model (House, 1977) (figure 1) is a useful framework for considering the different facets of identity formation. It draws on the psychological social psychology, symbolic interactionist and the personality and social structure perspectives. It recognises the relevance of the three levels of analysis and their interactions (Cote and Levine, 2002). The terms used, as they apply to undergraduate medical education, are defined as follows:

Social structure refers to the way society is arranged around the regulated ways people interrelate and organise social life. The society being considered here is the medical profession, one of the social institutions of the wider society. Institutions can be conceptualised as embodying patterns of behaviour, established over time as "the way things are done", within hierarchical settings (Jenkins, 2008). The behaviours and practices of social fields such as medical schools are often grounded in traditions that form, what Bourdieu (1990) terms, the field's doxa i.e. implicit, taken for granted presumptions. This in turn produces habitus - the habitual, patterned and thus pre-reflexive way of understanding and behaving that helps generate and regulate the practices that make up the social life of the school.

Institutions ascribe roles or status on individuals. These provide individuals with scripts that inform and provide the basis for evaluation of action. Students gaining entry to medical school are ascribed the status "medical student". Students, through prior socialisation, often possess rudimentary scripts on entry (Becker et al, 1961). The status of "medical student" endows "legitimate peripheral participation" in the communities of practice (Wenger, 2008) which exist within the school. This provides interactions, concrete patterns of behaviour that characterise the day-to-day contacts students have with their peers, teachers and other doctors. Medical society requires people to interact with each other for its norms, values and

roles to be actualised and students encounter medical society when interacting with people from it. The communities of practice encountered often contain members of other groups e.g. scientists, laboratory staff, nurses, other health care professionals, ancillary staff and patients. They also encounter communities of practice whose members are exclusively from these different groups.

These interactions take place within power relations. The medical profession is a nexus of power with dimensions of gender, race and class (Martimiankis et al, 2009). In Western medicine, like Western society, there has been a change in the uses and forms of power from juridical, which uses the language of rights and obligations e.g. codes of ethics, to forms of normalising or regulatory power, which uses the language of normality (Foucault, 1980). Regulatory power is dispersed throughout the social network rather than being concentrated in the hands of controlling bodies such as the General Medical Council. One way regulatory power works is by categorising people in terms through which they come to understand themselves. Individuals become subjected to the rules and norms engendered by knowledge about these identities. They adopt ways of being influenced by discourses from experts whose authority is based on rationality. These convey unofficial rules, implicit values, benefits and attitudes which are subsequently reproduced and reinforced in day-to-day interactions (de Montigny, 1995). Individuals are encouraged to scrutinise themselves for signs of pathology (Foucault, 1982, Hodges, 2004, Hodgson, 2005). Identities are therefore created within regimes of power/knowledge.

The personality level involves the intra-psychic domain of human functioning traditionally studied by developmental psychologists and psychoanalysts and is referred to as the psyche, the self, cognitive structure etc. depending on the school of thought (Cote and Levine, 2002). Personality structure was originally considered to be established in childhood. Empirical evidence, however, supports a cumulative continuity model of personality development. With time and age individuals become more adroit at interacting with their surroundings, promoting consistency of personality. The potential for change, however, reaches well into adult life promoted by environmental factors such as role experiences (Caspi and Roberts, 2001).

Arrow 1 (figure 1) represents the influence of social structure on interaction through exposure to institutionalized norms, values, rituals etc. and the implementation of laws. These are dependent on socio-historic context.

While students' socialisation occurs through formal teaching, informal instruction is more influential. Examples include role modelling, tacit behaviour (Coulehan and Williams, 2000) and the "invisible pedagogy" of bedside teaching (Bernstein, 1975, Atkinson, 1981). Students learn by observing the social impact of the behaviour of their peers and the doctors they encounter. They also learn through listening to stories passed onto them by older members of the profession (Stern and Papadakis, 2006). Experiencing structured silence (Holtman, 2008) and value-laden rituals, such as anatomy labs and morbidity and mortality reviews (Bosk, 1979), can help them avoid issues considered taboo by the profession. Some medical schools stage rites of passages that mark transitions in identity e.g. White Coat ceremonies. Other rites of passage are more implicit e.g. dissecting cadavers, working long hours (Monrouxe, 2009).

The modernist view is that students look to institutionalised norms and conventions to structure and give meaning to their behaviour during day-to-day interactions. These are reproduced and reinforced in day-to-day interactions. In this way social structure is reproduced, culture transmitted and social control mechanisms applied (Giddens, 1984). The post-modern view, however, is less deterministic. The coherence of an organisation's culture is viewed as deriving from the partial and mutually dependent knowledge of each individual involved in the process and develops out of the work they do together. Socialization involves

compromise where individuals make sense of institution(s) through their own unique backgrounds and in the current context in which the institution resides. Meaning is created rather than transmitted and culture is constantly being re-created (arrow 4, figure 1) (Tierney, 1997).

Arrow 2 (figure 1) represents how everyday interactions culminate in the internalisation of social structural norms, values and roles, Berger and Luckmann's (1966) "subjectification". During this process students actively define situations and develop individual constructions of reality. Internalisation is subject to learning principles and is filtered through various cognitive, perceptual and psychological defence mechanisms. The competencies associated with perceiving and filtering information are defined by Erickson (1958) as ego synthetic abilities.

Arrow 3 (figure 1) represents the ability of the individual student to produce presentations of "self". When a student re-engages or continues in the interaction process, s/he relies on previous internalisations to first define the situation and then present suitable impressions that others are intended to perceive, Erickson's (1958) ego executive abilities. Identity theory proposes behaviour is also influenced by comparison of the perceptual input with the set of meanings attached to the self in a social role, in this case medical student, which acts as a standard (Stets and Burke, 2005). An individual student's behaviour is a product of past internalisations, her/his attempt to act appropriately in a given situation and a product of her/his abilities to produce behaviour compatible with their past ego syntheses.

The view of the individual extracting a subjective psychological environment from objective surroundings, which causes individuals to continually revise their working models of self as a function of experience, is proposed by various social psychology theorists (e.g. Epstein (1991), Tomkins (1979), Bowlby (1973)). However, it has been challenged by empirical evidence which suggests that some individuals perceive, provoke and respond to their environments in ways that are consistent with their existing personalities and which re-affirm their existing self-concepts (Caspi and Roberts, 2001, Snyder and Ickes, 1985, Graziano et al, 1996).

Arrow 4 (figure 1) represents an important consequence of daily interaction with others which is the social construction of reality. During interaction a by-product of communication is the objectifying of people's mutually subjective perceptions of their worlds, Berger and Luckmann's (1966) "objectivation". The post-modern perspective views students as being actively involved in the creation of meaning that can effect change in social structures (Tierney, 1997). An example was at St Bartholomew's and the Royal London School of Medicine and Dentistry where students' recognition of unethical behaviour among some of the teaching staff led to change in attitudes and practice throughout the school (Doyle, 2001).

Through these iterative processes social structures are maintained or altered, interactions normalised or disrupted and personality continuity or change promoted.

A medical student's identity can therefore be classified at different levels:

1. Ego identity - refers to the more fundamental subjective sense of continuity characteristic of the personality. It is most immediately affected by intra-psycho factors and biological dispositions. The more the ego is challenged to effectively manage information about itself and its environment, and regulate behaviour on the basis of this information, the stronger it becomes (Erikson, 1968).
2. Personal identity – at this level students find a fit between their social identity as "medical student" and the uniqueness and idiosyncrasies of their learning/life history. Their biological dispositions and degree of agency can create an identity "style" producing individuality (Cote

and Levine, 2002). This may be limited, however, by the boundaries placed by institutions.

3. Social identity – at this level the student is most influenced by the pressure to fit into the available identity “moulds” created by cultural and role related pressures. Their identity as medical student is affirmed or denied in relationships with others. It can be affected by her/his ability to sustain the role of “medical student”. Her/his personal “style”, however, allows for individuality.

Figure 2 represents the social psychological levels of analysis as applied to identity formation and identity maintenance processes. It incorporates macro-structural, micro-interactive and individual, psychological factors (Cote and Levine 2002).

The student’s location in the medical school/hospital unit provides both possibilities and limits for her/his identity (arrow 1, figure 2). S/he will have certain types of personal identities validated or challenged by others e.g. a student is unlikely to find validation if her/his appearance is considered inappropriate (Goldie et al, 2007). Identity negotiations can occur where students attempt to manage aspects of their identities, sometimes defending and sometimes trying to modify them.

Arrow 2 (figure 2) represents the student’s perception and ego-synthesis of her/his personal identity displays along with what s/he thinks are others’ appraisals of these self-presentations.

Arrow 3 (figure 2) represents the role played by intra-psychic ego identity processes on personal identity displays. Behaviour may also be influenced by comparison of the perceptual input with the internal standard (Stets and Burke, 2005).

In late modern society presentations of self are based increasingly on image. Students may engage in strategic projections of images aimed at fitting in or gaining advantage. Late modern societal trends can also affect students so they become passive acceptors of whatever they find in their day-to-day worlds. They can become flexible in their views, eager to please, continuously presenting agreeable and contextually appropriate impressions. They are identity diffused, passive rather than active, with no real sense of inner continuity based on their ego synthetic and ego executive abilities. Their sense of ego identity weakens as they become dependent on concrete day-to-day validation and direction from others rather than maintaining an internal frame of reference (Cote and Levine, 2002).

Arrow 4 (figure 2) represents how personal identity displays are related to social identity. During interactions students attempt to manage others’ impressions of them and the identity they seek to portray (Goffman, 1969). This performative aspect of self may become unconscious with continual role rehearsal and may be influenced by habitus.

An individual’s need to achieve a social self-concept and a sense of self-esteem drives the process of social classification (Operario and Fiske, 1999). Social Identity theory suggests Individuals may seek to identify themselves with in-groups who are seen as the most salient to their social identities and sense of self-esteem. Simultaneously they also seek to differentiate themselves from non-salient out-groups. Identification with the in-group can result in de-individuation or depersonalization when the attitudes, beliefs and norms of the in-group are uncritically adopted (Hogg, 1988, Hogg and Terry, 2000).

IDENTITY CAPITAL

A student’s ability to assert and/or defend her/his identity may in part be dependent on their identity capital (Cote and Levine, 2002). This involves two types of assets – tangible and intangible. Tangible assets include the student’s social class, gender, prior degree(s),

membership of clubs e.g. rugby clubs, which can function as passports into social and institutional spheres. They can be important tools in impression management and the micro-politics of identity negotiations. Intangible assets include ego strengths such as an internal locus of control, self-esteem, a sense of purpose in life, the ability to self actualise and critical thinking abilities (Cote, 1997, Schwartz, 2001). Students' intangible assets can offset their lack of tangible assets.

Assets can be cashed in during interactions. In doing so identity exchanges take place, which if successful involve mutual acceptance with another individual, an informal group, a community or an institution. With this acceptance the student gains identity capital – an increase in some aspect of “who they are”. In this way students acquire identity capital on account of the resources at their disposal. As in the financial world capital begets capital (Cote and Levine, 2002).

Costello (2005) found that women, members of ethnic minorities and individuals from lower socio-economic groups under-perform on university degree courses leading to entry into the professions. One factor is their lack of tangible identity capital assets. Underperforming students often experience identity dissonance struggling to integrate their personal and professional identities. Incongruence of their underlying value and belief systems with those of their chosen profession was found to be a major issue. Identity dissonance can lead to maladaptive coping mechanisms e.g. dropping out of the course, dressing in a manner inconsistent with the norms of the student body. Students with greater tangible (and also in some cases intangible) assets, and whose personal identities are consonant with their new professional role often find it an easier process e.g. white male students of higher socio-economic status.

MULTIPLE IDENTITIES

The identification process begins early in childhood with the separation of the self from significant others. From early on individuals are prescribed identities such as gender, social class, ethnicity etc., which are relatively fixed compared to later identities such as "medical student" (Monrouxe, 2009). The mix of primary identities can promote or inhibit the development of student's existing or new identities (Costello, 2005). This can be linked to their value as identity capital.

Being a medical student is one of an individual student's many identities. S/he is simultaneously a member of multiple groups. How the individual represents the subjective interrelationships among her/his multiple group identities has implications for how s/he relates to other groups e.g. patients, other health care professionals (Roccas and Brewer, 2002). Turner et al's (1987) "in-group", "out-group" relations. Roccas and Brewer (2002) have suggested four models of how individuals perceive their multiple group memberships:

- 1 Intersection - where individuals focus on the intersection between different identities e.g. white, male medical students of high social class viewing those who don't share his combination of identities as being part of the out-group.
- 2 Dominance - where one in-group identity takes precedence over the others e.g. medical student. The in-group is viewed as those who share membership of this primary identity category.
- 3 Compartmentalisation - In this model students activate in-group identities according to context e.g. in the clinical setting their primary identity is viewed as medical student. In other contexts e.g. friendship groups other group identities such as religious affiliation or gender may become the basis for shared identity and the social

self.

- 4 Merging – where the student views in-group members as extending to anyone sharing any of their important social category memberships. The more social identities the student has the more inclusive he/she becomes.

Students who are more inclusive in their in-group membership exhibit higher levels of what Rocas and Brewer (2002) term social identity complexity. They are more open to change and less likely to be influenced by power values and the forces of conservatism. They are also more likely to value social justice (Turner et al, 1987) and be non-judgmental in dealings with patients (Monrouxe, 2009).

IMPLICATIONS FOR EDUCATORS

Identity is multiple, dynamic, relational, situated, embedded in relations of power, yet negotiable. During medical school the formation of students' professional identities are influenced more by the informal and hidden curricula than by formal teaching experiences.

To develop their professional identities students need to primarily interact with members of the medical profession. Interaction with older professionals also provides opportunities for the mutual negotiation of identities invested in different historical contexts (Wenger, 2008). Identities are created during all types of interactions e.g. bedside teaching, communication skills teaching, PBL groups, ward rounds etc and during exchanges in informal settings. It requires student's meaningful participation. Students learn behaviours and ways of being that look successful to them (Bandura, 1986). Role models and mentors play an important part in this process through demonstrating role appropriate behaviours and how to behave effectively in the organizational setting (Ibarra, 1999, Caspi and Roberts, 2001). The provision of feedback is important. Identity theory proposes that individuals develop meaning about themselves through feedback from others (Stryker and Stratham, 1985). This feedback, termed reflected appraisals, can be congruent or incongruent with a person's self-perception (Kiecolt, 1984). Burke (1991) proposed that where reflected appraisals are incongruent with an individual's self-perception behaviour is changed to conform to the appraisal. Swann (1987) however, found that individuals do not change their behaviour if it means changing their self-perception. Alternatively they associate with, and search out feedback from, individuals who confirm their self-perceptions.

Pratt et al (2006) found doctors in training also use performance feedback and role models in validating their professional identities. Role models and mentors need to be aware of their responsibilities and the power dynamics of interactions. When challenging students' presentations of "self" they have to be reflexive and consider their own prejudices. It is not a one-way process as feedback from students has the potential to validate or challenge the identities of role models and mentors. Students similarly need to be reflexive.

Members of minorities, however, often discount performance feedback provided by colleagues from majorities because of experiences with discrimination. They may also find few role models to emulate (Slay and Smith, 2011). The medical profession has recognised the need for it to be more inclusive (Parker, 2006). To effectively achieve this, institutions and their members need to be proactive identifying suitable role models and mentors. They also need to be proactive in helping students integrate into the various social networks existing within the institution. Effective integration into social networks creates opportunities for cooperation, trust and empathy with others (Granovetter, 1985). It also promotes students' normative adjustment (Holtman, 2008) and has the potential to promote social identity complexity in both students and existing members of the profession if relationships

are based on mutuality.

Reflection can be an important dynamic of personality change. Reflecting on how we react to new situations or unforeseen circumstances can lead to change. Kohn and Schooler's (1983) learning-generalisation model demonstrates how personality can be changed by adopting roles such as "medical student". The demands of the role can be incorporated into the student's self-concept as a result of their experiences (Deci and Ryan, 1990), which in turn can shape her/his behaviour in other life contexts. Effective reflection requires the capacity for critical thinking. This should extend beyond the rational, intellectual dimensions to include challenging the values, beliefs and assumptions that have been indiscriminately integrated during childhood and adolescence. It can also help raise awareness of institutional habits and challenge disempowering discourses and legitimise identities. Critical thinking needs to be developed (De Bono, 1978). Teachers can promote its development through encouragement, the provision of learning opportunities and guided practice involving principles and techniques (Coles and Robinson, 1989).

Students need to experiment with their provisional selves and evaluate experiments against internal standards and external feedback (Ibarra, 1999). Identities are also constituted by narratives during interactions. These help students make sense of their experiences and interpret their emerging identity in light of cultural and social expectations (Lawler, 2008). Identities are therefore moulded to provide meaning, a sense of coherence (McAdams, 1993), and a guide to their actions (Ricoeur, 1992). Narratives influencing identity formations are often seen in ordinary conversations as well as the "big stories" students tell of their lives. Students need to be provided with the "pedagogical space" (Atkinson, 1995) to understand and synergise their developing identities (Ibarra, 1999). It is important to provide this space from the start of the curriculum to help them reflect on their prior scripts and avoid projective identification with friends and family living out the stereotypes and projections associated with the medical student role (Mitchell et al, 2009). While reflective journals can be useful tools it requires a more interactional context to examine multiple perspectives and develop students' understanding of their developing professional identity (Monrouxe, 2009). It may also promote social identity complexity.

Educators need to utilise and maximise the opportunities that exist in the various relational settings students experience. There can be a danger of exposure to negative influences within these settings (Hafferty and Franks, 1994) therefore educators, and the wider profession, need to reflect on the institutionalised norms and conventions that influence student's behaviours (Du Gay et al, 2000). Students can offer the potential for reflection and challenge to institutional habits (Doyle, 2001, Monrouxe, 2009). To promote this challenge institutions and individual members need to be aware of existing power relations and develop strategies to empower students' contributions both as peripheral members of communities of practice and at institutional level. These need to be reflected in the discourses of the medical profession.

It is imperative that students interact with patients and members of other professions and be exposed to their discourses. Again students' participation needs to be meaningful. Meaningful interaction helps students find a way of appreciating and coordinating multiple perspectives. It also helps them break down boundaries, reconcile the multidisciplinary approach into their practice and promote ways of being which encompass multiple, conflicting perspectives. Similarly, exposure to the humanities has the potential to broaden students' perspectives, raise awareness and promote empathy and identification. It can assist the development of social identity complexity.

Education in its broadest sense is about the transformation of the self into new ways of thinking and relating. Helping students form, and successfully integrate their professional selves into their multiple identities, is a fundamental of medical education.

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JOHN GOLDIE was lead researcher in the evaluation of ethics learning in Glasgow University's curriculum for 10years. For the last 6 years he has been lead researcher on projects investigating the delivery of professionalism teaching and the formation of medical students' professional identity.

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FIGURE 1

The PSSP model
after House 1977

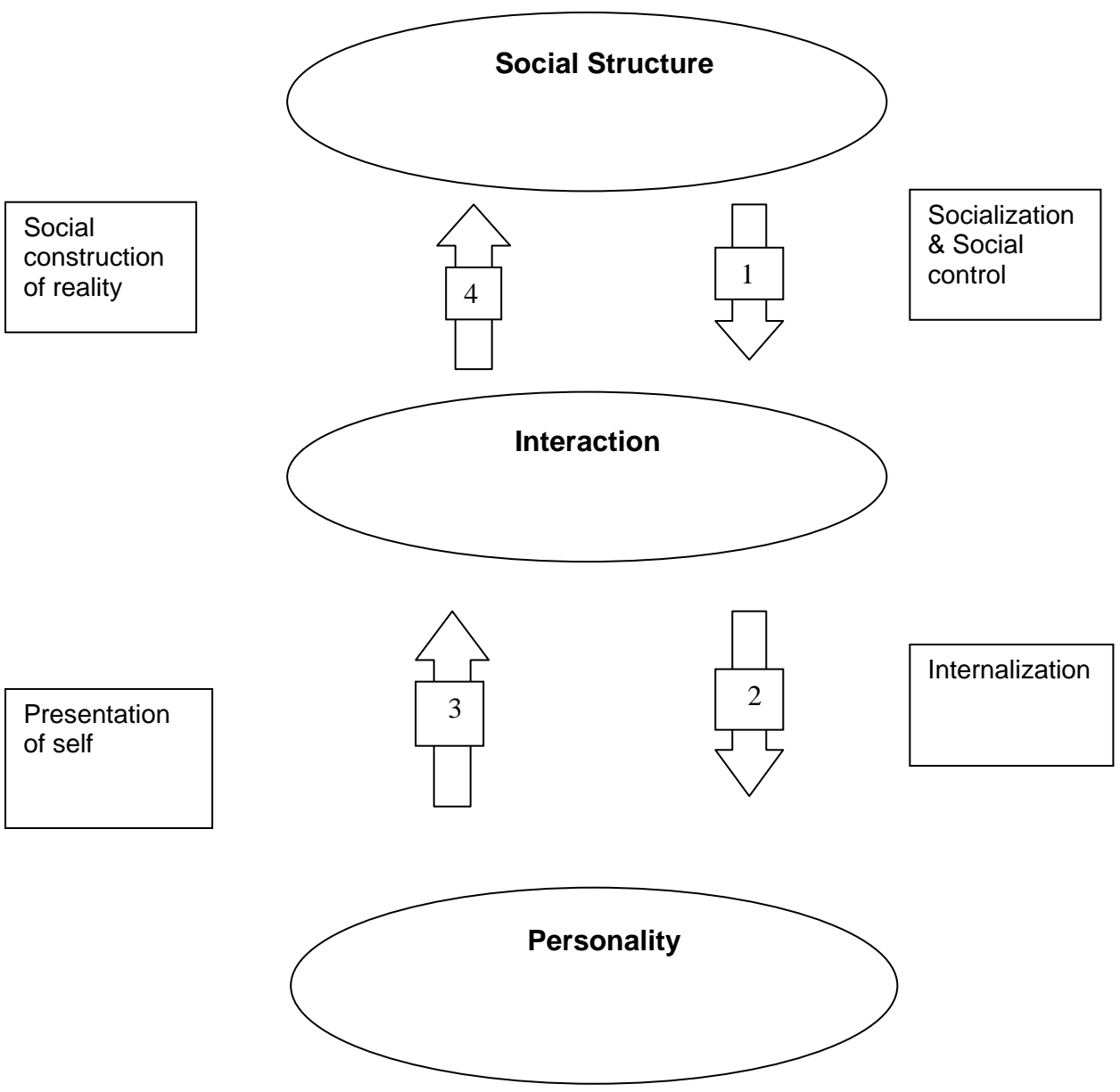


FIGURE 2

The social psychological levels of analysis as applied to identity formation and identity maintenance processes after Cote and Levine (2002)

