GCE A LEVEL

1290U30-1

S19-1290U30-1

PSYCHOLOGY – A2 unit 3
Implications in the Real World

MONDAY, 20 MAY 2019 – AFTERNOON

2 hours 30 minutes

ADDITIONAL MATERIALS

A WJEC pink 16-page answer booklet.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use pencil or gel pen. Do not use correction fluid.

Answer **three** questions in Section A.

Answer **one** question in Section B.

Write your answers in the separate answer booklet provided following the instructions on the front of the answer booklet.

Use both sides of the paper. Write only within the white areas of the booklet.

Write the question number in the two boxes in the left hand margin at the start of each answer

e.g. | **0** | **1** | .

Leave at least two line spaces between each answer.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that Section B of this paper is synoptic and so will test understanding of the connections between the different elements of the subject.

You are reminded of the necessity for good English and orderly, clear presentation in your answers. Assessment will take into account the quality of written communication used in your answers.

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SECTION A: The study of behaviours

Answer **three** *questions in full.*

0 1 **Addictive behaviours**

a) Describe **two** individual differences explanations for addictive behaviours. [10]

b) Some psychologists would suggest that individual differences explanations do not explain addictive behaviours as well as the biological and social psychological explanations.

With reference to this statement, evaluate individual differences explanations of addictive behaviours. [15]

0 2 **Autistic spectrum behaviours**

a) Describe **two** individual differences explanations of autistic spectrum behaviours. [10]

b) (i) Briefly explain how social psychological explanations could be applied to modifying autistic spectrum behaviours. [5]

(ii) Evaluate the methods of modifying autistic spectrum behaviours. [10]

0 3 **Bullying behaviours**

David has been in trouble in school for acts of both physical and verbal aggression and is at risk of being excluded. Both his father and his older brother also show high levels of aggression. David's teacher describes him as struggling to understand how other children are feeling and often reacts badly when criticised.

a) Describe how **two** explanations of bullying behaviours can be applied to the above scenario. [15]

b) Evaluate biological explanations of bullying behaviours. [10]

0 4 **Criminal behaviours**

a) (i) Briefly describe the characteristics of criminal behaviours. [5]

(ii) Describe **one** social psychological explanation of criminal behaviours. [5]

b) Some psychologists would suggest that criminal behaviours can only be understood through a combination of different explanations.

With reference to this statement, evaluate explanations of criminal behaviours. [15]

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0 5 **Schizophrenia**

Rhian has been experiencing some distressing symptoms and has been referred to a psychiatrist. She reports hearing voices and is worried that people are watching her. Her father reports that Rhian often does not go to work, has a lack of interest in what is going on around her and shows very little emotion. He worries that recent family problems may have affected his daughter.

a) Describe how **two** explanations of schizophrenia could be applied to the above scenario. [15]

b) Evaluate social psychological explanations of schizophrenia. [10]

0 6 **Stress**

a) (i) Describe **two** social psychological explanations of stress. [10]

(ii) Briefly explain how social psychological explanations can be applied to modifying stress. [5]

b) Evaluate **one** method of modifying stress. [10]

SECTION B: Controversies

Answer **one** *of the questions.*

Either,

0 7 **Scientific Status**

Using examples from psychology, discuss the costs and benefits of psychology being a science. [25]

Or,

0 8 **Cultural Bias**

Discuss the controversy of cultural bias, including reference to social and historical context. Use examples from psychology in your answer. [25]

END OF PAPER

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Surname	StemUp Model Solution
Answer booklet	Write the question number in the left-hand margin at the start of each answer.

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0 1 (a)

One individual differences explanation is Lang's (1983) addictive personality traits. Lang reviewed research on people with addictions and identified a cluster of personality factors that can contribute to the emergence of an addiction. These are: impulsivity, behaving without thinking and seeking instant gratification rather than waiting for a larger, later reward; valuing non-conformity, so the person rejects the accepted goals and values of society; experiencing heightened stress while lacking effective coping skills, so substances or activities such as gambling are used to escape; and a tolerance of deviance combined with a sense of social isolation. Importantly, Lang argued that there is no single 'necessary and sufficient' trait that causes addiction, so there is no one addictive personality. Instead, people who show several of these traits are more vulnerable, and he suggested that identifying the traits would be useful in the treatment of addiction, for example teaching coping skills to someone high in stress.

A second explanation is cognitive biases, a cognitive explanation. It starts from the assumption that addiction is an irrational act, as the addict continues despite clear harm, so it must be underpinned by irrational thinking or 'cognitive biases'. These are often heuristics, mental shortcuts that save effort but lead to errors. The representativeness bias is the belief that random events follow a pattern and that it is possible to generalise from a very small sample of events to 'what should always happen'. For example, a gambler who has lost five times in a row on a fruit machine believes a win is now 'due' (the gambler's fallacy), so they keep playing. The availability bias is the belief that events are more likely because we hear about them or can recall them easily, so news reports of lottery winners make a person overestimate their own chance of winning. Other

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biases include the illusion of control, believing that skill can influence a chance outcome, and attentional bias, where addicts notice drug or gambling related cues more than other people, which triggers cravings. These distorted beliefs maintain the behaviour and make relapse more likely, because the person interprets losses as 'near misses' rather than as evidence that they should stop.

0 1 (b)

Individual differences explanations such as Lang's traits, Eysenck's personality theory, cognitive biases and field dependence locate the cause of addiction within the person. The statement suggests that they explain addiction less well than biological and social psychological explanations.

A strength of personality explanations is that there is evidence linking personality to addiction. Eysenck argued that addicts score high on psychoticism and neuroticism, which link to impulsivity and to self-medication of anxiety. However, most of this research is correlational and retrospective: personality is measured after the addiction has developed, so the traits may be an effect of addiction rather than a cause, as years of drug use can make a person more anxious and isolated. Dong et al. (2013) addressed this with a prospective design, measuring personality before internet addiction developed, and still found that high P and N scores were linked to addiction, which strengthens the explanation. Yet even here personality only predicts a small part of the variance, and biological factors may be stronger predictors: twin studies suggest that around half of the variation in alcohol dependence is genetic, which supports the statement. On the other hand, personality itself is partly heritable, so personality and biology may interact rather than compete. Lang's traits are also problematic because he admitted that no trait is necessary and sufficient, and McNamara et al. found that impulsivity increased the likelihood of some addictions but not others, which lessens the usefulness of a general addictive personality.

There is good evidence for cognitive biases. Griffiths (1994) asked regular and non-regular fruit machine gamblers to 'think aloud' while playing, and found that

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regular gamblers made significantly more irrational verbalisations, such as talking to the machine, and believed they were more skilful than they were. Joukhador et al. (2003) found that problem gamblers scored much higher than social gamblers on the Gambling Belief Questionnaire, which measures cognitive biases, and Johnson et al. (1997) supported attentional bias towards addiction-related cues. However, this evidence may simply describe the thoughts of gamblers rather than explain why they started gambling; the biases may develop as a result of repeated gambling. Also, everyone shows heuristics such as availability, so cognitive biases cannot explain why only some people become addicted, and representativeness and availability are easy to apply to gambling but much harder to apply to addictions such as smoking or alcohol, where physical dependence is central. Here biological explanations, such as dopamine release in the reward pathway and withdrawal symptoms, are more convincing, which supports the statement.

Methodologically, the research uses self-report questionnaires, which are open to social desirability bias, and some studies have small or unrepresentative samples, often of male gamblers. Field dependence is linked to alcoholism, but the relationship is not fully understood and is again correlational. There are also ethical issues, as research involves vulnerable individuals and allowing gamblers to lose money in a study raises the question of protection from harm. If risk of addiction could be predicted from personality type, labelling young people as 'addiction prone' could be stigmatising and raises social and political concerns. However, individual differences explanations are useful. Cognitive biases can be applied directly to cognitive restructuring in CBT, where a therapist identifies and challenges a gambler's irrational beliefs, and this is more effective for gambling than for substance addictions. Understanding Lang's traits can help tailor treatment, for example coping skills training. Biological explanations cannot explain why addictions to activities such as gambling exist, and social explanations cannot explain why only some people exposed to peers and the media become addicted, so individual differences fill an important gap.

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	In conclusion, the statement is partly correct: individual differences explanations have weaker causal evidence than biological explanations and are less applicable to substance addictions. However, they are valuable for behavioural addictions such as gambling and for treatment. The most complete account is a biopsychosocial one, in which biological vulnerability, personality and cognitive biases interact with social influences.
0 2 (a)	One explanation is theory of mind (ToM) deficits. Theory of mind is the ability to understand that other people have thoughts, beliefs, desires and feelings that are different from our own, and to use this to predict their behaviour. Baron-Cohen argued that people with autistic spectrum behaviours have 'mindblindness', a specific cognitive deficit in ToM, which explains their difficulties with social interaction, communication, pretend play and taking the perspective of another person. Baron-Cohen, Leslie and Frith (1985) tested this using the Sally-Anne false belief task. Children watched Sally hide a marble in her basket and leave; Anne then moved it to her box. Asked where Sally would look, 80% of the 20 autistic children wrongly pointed to the box, whereas about 85% of typically developing children and 86% of children with Down's syndrome correctly said the basket, despite the autistic group having a higher mental age. Later, the Reading the Mind in the Eyes test showed that adults with high-functioning autism were less accurate at judging emotions from photographs of eyes, suggesting that a ToM deficit continues in more subtle forms in adulthood. A second explanation is weak central coherence (WCC), proposed by Frith (1989). Central coherence is the normal tendency to integrate pieces of information into an overall meaningful whole, or 'gist', so we see the bigger picture. People with autistic spectrum behaviours are thought to have weak central coherence: they process information locally, focusing on fine detail rather

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than the overall pattern. This explains both weaknesses, such as difficulty understanding context in conversation, and strengths, such as exceptional attention to detail, savant skills and restricted, intense interests. It also explains insistence on sameness, as a small change to a detail may be very noticeable. Shah and Frith (1983) found that autistic children were faster and more accurate than controls on the Embedded Figures Test, finding a simple shape hidden in a complex picture, because they were not distracted by the whole design. Happé and Frith (2006) later revised the theory, arguing that WCC is a detail-focused processing bias or cognitive style rather than a deficit, so the person can see the whole when instructed to, but naturally attends to the parts. Unlike ToM, WCC can explain the non-social features of autism.

0 2 (b)(i) Social psychological explanations focus on relationships, thinking styles and communication, so modification aims to change the social environment of the individual. Relationship Development Intervention (RDI), developed by Gutstein, aims to develop 'dynamic intelligence', the ability to think flexibly and consider alternative views. It works with the whole family rather than just the child: parents are trained as 'guides' and use everyday shared activities and interactions to help the child form relationships and emotional bonds, and to read social cues, within this social environment. The Picture Exchange Communication System (PECS) also focuses on relationships between the learner, the teacher and a facilitator, using modelling and reinforcement: the child hands a picture card to a communication partner and is rewarded with the item. Based on empathising-systemising theory, Lego therapy gives children in a small group different roles (supplier, designer, builder) so that a systemising activity develops social skills, and Baron-Cohen's Transporters DVD teaches recognition of emotions in faces.

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0 2 (b)(ii) The Picture Exchange Communication System (PECS) was developed by Bondy and Frost to improve functional communication. Children are taught in phases to exchange a picture card for a desired item, then to build sentence strips. There is evidence for its effectiveness: Charlop-Christy et al. (2002) found support for the three central claims of PECS, that it helps children with ASD acquire spontaneous speech, that it is easy to learn, and that it generalises to non-training situations. However, this study used only three participants, so the findings cannot be generalised. A meta-analysis by Flippin et al. (2010) concluded that PECS was only 'fairly effective' for communication, with little evidence of long-term improvement or of spontaneous speech, and some evidence that it may even delay speech development. A strength is ease of use: the materials are simple, pictures can be modified to suit the individual child and, crucially, the child does not need to maintain eye contact before training begins, which explains its popularity and gives it good face validity for teachers and parents. Ethically, the child is rewarded and may gain motivation and self-esteem, but withholding desired items until a picture is exchanged is questionable, and Baron-Cohen argues it would be better to use the child's existing interests. PECS is also a commercial product whose training is expensive and only available through Pyramid Educational Consultants.

Relationship Development Intervention (RDI) aims to develop theory of mind and dynamic intelligence through family-based guided activities. Gutstein et al. (2007) found that the majority of children who completed RDI showed 'remarkable' improvements in social and educational skills. However, this study was carried out by the organisation that sells RDI, so researcher bias is likely, there was no control group of children not receiving RDI, and there are no independent, peer-reviewed studies, so Research Autism UK cannot recommend it. On the other hand, many parents report reduced pressure in family life and greater self-esteem in the child, so it may have benefits beyond symptoms, but this must be balanced against the risk of 'offering false hope' to families. As

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RDI is also a commercial organisation, there is a danger of expensive treatments being bought without evidence at a time of rising ASD diagnoses.

In conclusion, neither method has strong evidence. PECS has more research support, at least for functional communication, and is practical and cheap to use once trained, whereas RDI relies on biased, uncontrolled research. Independent randomised controlled trials are needed before either can be confidently recommended, and the best approach is probably to tailor methods to the individual child.

0 4 (a)(i) For a behaviour to be considered a crime it must cause harm to a victim, whether physical, psychological or financial; there must be criminal intent (mens rea) as well as the act itself; and the behaviour must be legally forbidden and punishable by the state, so what counts as crime varies between cultures and over time. Farr and Gibbons suggested seven categories of criminal behaviour: property/predatory crime (burglary), property/fraudulent crime, interpersonal violence (general), interpersonal violence (sexual), transactional vice (drug dealing, prostitution), order disruption (public disorder) and folk/mundane crime (minor offences such as speeding). Offenders are most often young males, with offending peaking in the late teens, and white-collar crime is linked to higher socio-economic status. Risk factors include genetic factors, birth complications combined with early maternal rejection, poor parenting and exposure to violent models, poverty, delinquent peers, drug and alcohol use and mental illness.

0 4 (a)(ii) Differential association theory (Sutherland, 1939) is a social learning explanation stating that criminal behaviour is learned through interaction with other people, mainly within intimate personal groups such as the family and peers. Through this association a person learns both the techniques of committing crime, such as how to steal a car, and the motives, drives, rationalisations and pro-crime

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attitudes that support it. A person becomes criminal when they are exposed to an excess of definitions favourable to breaking the law over definitions unfavourable to it. The impact of associations varies in frequency, duration, priority (how early in life) and intensity (how important the person is). Criminal behaviour is learned in the same way as any other behaviour, through conditioning, reward and imitation, and the attitudes become internalised. This explains why crime runs in families and why prison may act as a 'school for crime', and it can explain white-collar crime as well as street crime.

0 4 (b) Explanations of criminal behaviour come from three approaches: biological (inherited criminality, the role of the amygdala and the disinhibition hypothesis), individual differences (Eysenck's criminal personality, intelligence and psychopathic personality) and social psychological (differential association, gender socialisation and normalisation theory). Evaluating each shows that none is sufficient on its own, which supports the statement.

There is evidence for inherited criminality from adoption studies. Mednick et al. (1984) studied over 14,000 Danish adoptions and found that 13.5% of sons with neither biological nor adoptive parent convicted had convictions, compared with 20% where the biological parent was convicted and 24.5% where both were, suggesting a genetic influence. Raine et al. (1997) found reduced prefrontal activity and abnormal amygdala activity in PET scans of 41 murderers compared with matched controls, and Gospic et al. (2011) found that reducing amygdala activity with a drug reduced aggressive rejection of unfair offers in the Ultimatum Game. However, this supports a role for the amygdala in aggression rather than in all crime, and biological explanations offer little explanation of non-violent crimes such as fraud. Much research is correlational, as experiments are rarely possible. Crucially, Raine, Brennan and Mednick (1994) found that birth complications predicted violent crime at 18 mainly when combined with early maternal rejection, which shows that biology and environment interact, as

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the statement suggests. Biological explanations are also deterministic, raising issues for the criminal justice system if behaviour is innate and outside the individual's control, and biological treatments such as drugs or surgery raise ethical concerns, although more ethical applications exist, such as dietary supplements, which Gesch et al. (2002) found reduced disciplinary offences in young offenders by around a quarter.

There is support for Eysenck's theory, as Dunlop et al. (2012) found that extraversion and psychoticism predicted delinquent and antisocial behaviour, and Zuckerman showed that personality has a biological component, which links this explanation to biology. However, recent evidence suggests that personality is not consistent over time or situations (Graham et al., 2017), weakening its ability to predict offending, and psychometric tests suffer from social desirability bias.

Knowledge of personality is useful for treatment, though: psychopathic individuals, identified with Hare's PCL-R, are not helped by anger management or social skills training. Cognitive research shows that offenders tend to make hostile attributions (Schönenberg) and misread non-verbal cues, which has been applied in anger management programmes, and levels of moral reasoning differ between types of offender, although Kohlberg's theory describes moral reasoning rather than moral behaviour.

Social psychological explanations were an important development in recognising environmental factors. Differential association is supported by Osborn and West (1979), who found that 40% of sons of criminal fathers had a conviction compared with 13% of sons of non-criminal fathers, and by Farrington's longitudinal Cambridge Study of 411 boys, in which having a convicted parent strongly predicted offending. However, this evidence is correlational, family similarity could be genetic, and the theory cannot explain impulsive crimes or why people exposed to the same influences do not all offend. Gender socialisation explains why males commit more crime, but not why most males do not offend.

These evaluations show that each explanation explains only some crimes or some

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offenders, and that the strongest evidence, such as Raine's interaction findings and the overlap between personality and biology, involves several factors together. In relation to the nature-nurture debate, modern research focuses on the interaction between genetic predisposition and environmental triggers in a diathesis-stress model, which is also less deterministic. Therefore I agree with the statement: criminal behaviour is best understood through a combination of biological, individual and social explanations, and this also leads to more effective, tailored methods of modification.

0 8 Cultural bias occurs when research findings or theories from one culture are assumed to apply universally, so that other cultures are judged by the standards of the researcher's own culture. This is linked to ethnocentrism, the natural tendency to see one's own group as normal or superior and to judge others against it. The controversy is whether psychology, which claims to discover universal laws of behaviour, is culturally biased, and whether cultural variations reflect genuine difference or bias in the way research is conducted and interpreted.

There is strong evidence that psychology is dominated by one culture. Henrich et al. (2010) found that 96% of participants in top psychology journals came from Western industrialised countries containing only about 12% of the world's population, so samples are 'WEIRD' (Western, Educated, Industrialised, Rich and Democratic), and Arnett (2008) found that 68% of samples came from the USA alone. Textbooks are also Western-biased, and there is little awareness of psychology produced in non-Western countries. Funding and peer review mechanisms are controlled by Western institutions and journals published in English, so widening participation is unlikely. If findings from American undergraduates are generalised to all humans, this is a form of imposed etic. Berry (1969) distinguished between emics, behaviours that are specific to one culture and studied from within it, and etics, behaviours that are universal. An

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imposed etic occurs when a technique developed in one culture is used in another as if it were universal. A clear example is Ainsworth's Strange Situation, developed in the USA. Van IJzendoorn and Kroonenberg (1988) carried out a meta-analysis of 32 studies in eight countries and found that secure attachment was the most common type everywhere, but avoidant attachment was more common in West Germany and resistant attachment more common in Israel and Japan. Takahashi (1990) found that 32% of Japanese infants were classified as resistant and none as avoidant. This could be interpreted as bias: Japanese infants are rarely separated from their mothers, so the separation episode is far more stressful, and calling them 'insecure' judges Japanese child-rearing by American norms. Here the difference reflects culture, not inferior attachment, which shows how a difference can wrongly be turned into a deficit.

The historical and social context of research is also crucial, because time periods and sub-cultures can be understood as cultures. Asch's (1951) conformity study, in which participants conformed on about 37% of critical trials, was carried out in 1950s America, during the McCarthy era, when conformity was socially valued. Perrin and Spencer (1980) replicated it with British engineering students and found only one conforming response in 396 trials, suggesting that the original findings were 'a child of their time'. Bond and Smith (1996) conducted a meta-analysis of 133 Asch-type studies in 17 countries and found that conformity was higher in collectivist cultures than individualist ones and had declined in the USA since the 1950s. Similarly, Milgram's obedience research has produced very different rates of obedience in different countries, suggesting that destructive obedience is shaped by cultural and historical norms rather than being a universal law.

Historically, cultural bias has had serious social consequences. In 1917 the US army tested about 1.75 million recruits using the Yerkes IQ tests, which contained culturally specific questions about American life. Recent immigrants from Southern and Eastern Europe scored lowest, and the results were used to

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support the 1924 Immigration Act, which restricted immigration from those countries. The tests measured familiarity with American culture rather than intelligence, so this is a clear example of bias rather than difference. In psychopathology, Cartwright's 1851 'drapetomania', a supposed mental illness causing enslaved Africans to run away, and the classification of homosexuality as a mental disorder in the DSM until 1973, show that diagnoses reflect the social values of their time. Cochrane (1977) found that African-Caribbean immigrants in Britain were diagnosed with schizophrenia at several times the rate of white Britons, while rates in the Caribbean were similar to those of white Britons, suggesting misdiagnosis by white psychiatrists who misinterpreted culturally normal behaviour as symptoms.

Theories are also biased. Kohlberg's stages of moral development were based on American males and place justice-based reasoning, valued in individualist cultures, at the highest stage, so people from collectivist cultures who reason about community obligations may be judged as less morally developed. This links to alpha bias, which exaggerates differences between groups, and beta bias, which ignores them: Western theories of relationships, for example, often assume voluntary relationships, ignoring arranged marriages that are common in collectivist cultures.

However, psychology has responded to the controversy. Cross-cultural research, such as Bond and Smith's meta-analysis and Hofstede's work on individualism and collectivism, has improved our understanding of different cultures and has made researchers more aware of their own ethnocentrism. Cultural relativism, the view that behaviour must be understood within its cultural context, is now widely accepted, and DSM-5 includes guidance on cultural concepts of distress. Researchers can reduce bias by using local researchers, emic approaches that begin with indigenous concepts, samples from many cultures and triangulation of methods. Indigenous psychologies, for example in India and China, are developing theories from within those cultures.

Nevertheless, cross-cultural research has its own problems. Cultures are not

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homogeneous, and treating 'Japan' or 'the West' as single units ignores variation within countries: van IJzendoorn and Kroonenberg found that variation within cultures was 1.5 times greater than variation between them. Translating materials can change their meaning, and participants may respond differently to a foreign researcher, so the methods themselves may remain an imposed etic. Some argue that cultural relativism can go too far, preventing psychologists from recognising universal human needs or harmful practices. Furthermore, globalisation means that cultural differences may be reducing, so some behaviours, such as secure attachment being the most common type, appear genuinely universal.

In conclusion, there is clear evidence that psychology has been culturally biased, with research dominated by WEIRD samples, imposed etics such as the Strange Situation, and findings that reflect the social and historical context in which they were produced, from Asch's 1950s America to the Yerkes IQ tests. This bias has had real social consequences, such as immigration restrictions and misdiagnosis. However, many cross-cultural differences reflect genuine difference rather than bias, and psychology is increasingly aware of this controversy and is using cross-cultural methods to address it. The challenge is to distinguish true universals from culturally specific behaviours, and this requires research carried out by and with people from many cultures, interpreted within their historical and social context.