CULTURAL IDENTITY STYLES, WELL-BEING, AND CONTEXT OF RECEPTION:

A DAILY DIARY STUDY

By

Amanda Fong Jack

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Abstract

In our increasingly multicultural world, people manage their multiple cultural identities in a number of different ways. This study examines two mechanisms that individuals use in negotiating cultural identities: hybridising, which is characterised by picking and choosing the desirable elements from two or more cultures and blending them together in a novel way, and alternating, which involves shifting identities depending on the circumstances. The study also investigates how these styles are affected by contextual factors and how they are related to mental health outcomes. The data were collected through a 12-day diary study with 870 Hispanic university students. Multilevel modelling was used to examine longitudinal relationships between the hybrid and alternating cultural identity styles, perceived negative context of reception, and psychological well-being. The main findings are that within individuals, negative perceptions of the context of reception predict greater alternating style, and the alternating style, in turn, predicts greater depression, while the hybrid style leads to increased well-being. Reciprocal relationships between these variables were also found. Although preliminary, findings also show that the alternating and hybrid identity styles operate in a reciprocal relationship. The within-individual approach, which allows us to report idiosyncratic changes in the cultural identity styles in response to the context of everyday life, makes a unique contribution to understanding how bicultural individuals negotiate multiple cultural identities.

KEY WORDS: cultural identity styles, daily diary, well-being, within-level.

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Introduction

Forces such as technological change, globalisation, and migration have led to unprecedented increases in exposure to different cultures worldwide. Since 1990, the number of international migrants has grown at a rate faster than the world's population, and this trend is projected to continue into the next decade (United Nations, 2015). Hand-in-hand with cross-cultural contact is an increased engagement in the two-way processes of change and continuity at the individual and group level. Along with ecological context, these processes have become important foci in the field of acculturation studies (for an overview, see Ward & Geeraert, 2016).

Long before these recent trends in global migration, John Berry began studying the processes of acculturation (Formative papers include: Berry, 1970, 1974, 1984). According to John Berry's (1997) original acculturation theory, acculturating individuals are faced with the challenge of maintaining their original cultural heritage and simultaneously engaging in the everyday life of their wider culture. This challenge has been encapsulated in two questions: 1) "Is it of value to maintain my original cultural heritage?" and 2) "Is it of value to engage in intercultural contact with other groups?" The four dichotomised (high-low) answers to these questions reflect four acculturation strategies, now well known in acculturation literature as: *assimilation* (high engagement, low maintenance); s*eparation* (high maintenance, low engagement); *marginalisation* (neither maintenance, nor engagement); and *integration* (high maintenance and engagement).

Conceptually, acculturation can refer to both immigrant and non-immigrant ethnic groups; to the changes experienced by both those who enter a new culture; and to members of

the receiving culture. However, much of the theoretical literature, as well as the current study, focuses primarily on immigrant populations.

Integration

Of the four acculturation strategies described above, integration has received the most interest. Moreover, acculturation researchers describe the processes of integration with increasing complexity. For example, in addition to describing integration in terms of high maintenance and engagement, as Berry does, integration has also been conceptualised as a combination of cultural maintenance and cultural adoption (Bourhis, Moïse, Perreault, & Senécal, 1997) and as maintenance and identity with the new culture (Hutnik, 1991).These conceptualisations of involvement with the new culture (going from just contact with, to adoption of, and to identification with the national culture) are increasingly psychologically "internal" processes, and lead to different outcomes (Berry & Sabatier, 2011).

Conceptualisations of integration are not only deepening, they are broadening as well. Examination of the acculturation process spans multiple cultural domains, such as behaviours, practices, values, and identifications (Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Ward & Kus, 2012).

The term integration is often used interchangeably with *biculturalism*, since it involves the internalisation of two or more cultures (Benet-Martínez & Haritatos, 2005; Schwartz & Zamboanga, 2008). It stands out as the strategy most preferred by minority and immigrant groups. Additionally, it is the strategy most strongly associated with positive psychological well-being and social functioning (Berry, Phinney, Sam, & Vedder, 2006; Nguyen & Benet-Martínez, 2013). For example, multicultural individuals who pursue the integration strategy report less

depression (Ward & Kennedy, 1994) and greater subjective well-being (Zheng, Sang, & Wang, 2004). Indeed, even when multicultural immigrants undergo extreme emotional distress, eventually leading to mental disorder, integration, as an acculturation style, seems to serve as a protective resource and possibly prevents further decline (Behrens, del Pozo, Großhennig, Sieberer, & Graef-Calliess, 2015).

Cultural Identity Integration: What is it, and how is it achieved?

With the aim of understanding individual differences in biculturalism, Benet-Martinez and colleagues developed and tested a construct named Bicultural Identity Integration (BII, Benet-Martínez & Haritatos, 2005; Yampolsky, Amiot, & de la Sablonnière, 2013). BII captures the degree to which a bicultural person perceives their two cultures as compatible (*harmonious*) and integrated (*blended*) as opposed to incompatible (*conflicted*) and distant (*compartmentalised*). Their results converge to show that those who see their cultures as more compatible/harmonious and integrated/blended have more positive outcomes.

Benet-Martinez et al. arrived at BII via their research on *cultural frame-switching* (CFS): a functional process used by bicultural individuals to balance their cultural identities in everyday life (Benet-Martínez & Haritatos, 2005; Benet-Martínez, Leu, Lee, & Morris, 2002). CFS involves the cognitive process of moving from one cultural meaning system to another in response to situational cues. In other words, a subset of an individual's cultural knowledge is cued by the immediate environment and serves as a behavioural guide. For example, a Chinese-American bicultural person may exhibit characteristically Western behaviours when primed with Western cultural cues, and characteristically East Asian behaviours when primed with East Asian cues (Hong, Morris, Chiu, & Benet-Martínez, 2000).

In addition to the focus on characteristics of bicultural identities, researchers have also pursued the question: How is cultural identity integration achieved? In a qualitative investigation of integration, Stuart and Ward (2011) uncovered strategies used by bicultural individuals for achieving balance (or integration). The investigators conducted focus groups with young Muslim immigrants in New Zealand. Specifically, participants were asked, "What do you think is the most important thing that helps you succeed in your life in New Zealand?", and thematic analysis was used to collate their responses. The notion of *balance* was identified as a pathway to success, and this was consistent among participants. *Alternating* and *blending* were spontaneously identified (in open-ended questions) as strategies for achieving balance. The alternating strategy could be identified by choices to alter clothing, food, or language depending on the context:

At home I am more Iraqi than outside of home for obvious reasons, because I live with Iraqi people at home, and I speak Arabic at home. I'd definitely say I change depending on the environment I'm in.

Blending also involved a conscious choice. However, individuals who chose the blending strategy created a new set of values, practices, and identities that were not limited to one or another culture:

I went from a pure Iraqi lifestyle to a hybrid New Zealand/Iraqi Muslim lifestyle. We tried to pick and choose between cultures…you have the advantage of choosing the best qualities of the cultures . . .

A third strategy, *minimising difference*, was also identified in this study. This study showed that participants themselves regard achieving a balance as a dynamic process through which they could negotiate their multiple social worlds.

Following this qualitative research, Ward, Tseung-Wong, Szabo, Qumseya, and Bhowon (2017) recently drew upon Berzonsky's (1990) theory of identity to provide a framework with which we can understand integration as a process of identity development. They proposed that bicultural individuals use multiple different strategies to make decisions about cultural identity. The researchers identified and tested two of these strategies: the *hybrid* and *alternating* identity styles. Evidence showed that these cultural identity styles did indeed operate in a manner consistent with the qualitative research. The hybrid style involved picking and choosing elements of different cultures and blending them in a manner advantageous to the individual. The alternating style involved shifting cultural identities in response to the social context.

Evidence was also found to support another part of their theory, namely, that both cultural identity styles are readily accessible. Specifically, both hybrid and alternating styles are available to any bicultural person, and either one may be activated depending on individual differences in personality and situational factors. Additionally, the authors found that both cultural identity styles are activated by a motivation to achieve integration. Associations were also found between the two acculturation styles and the BII model. The hybrid style was associated with greater BII blendedness, and the alternating style was associated with less BII harmony.

Although it is beyond the scope of the present study to address Ward et al.'s model in its entirety, a key element of the model is the differentiation between identity style and *identity consolidation vs. identity conflict*. Identity consolidation, a concept developed by Seth Schwartz (2006, 2007), refers to a synthesized and agentic sense of self that can make effective decisions and create a life course without much external help. It includes other well-researched constructs related to identity such as *identity commitment* (the clarity that one has in regard to goals,

convictions, and beliefs etc.; Berzonsky & Cieciuch, 2016). Ward et al. found that identity

consolidation and identity conflict mediated the relationship between the cultural identity styles

(hybrid and alternating) and well-being.

Ward et al.'s programme of research on cultural identity styles enriched earlier theorising

on biculturalism, to which I turn briefly now. LaFromboise, Coleman, and Gerton (1993)

proposed five models of biculturalism, two of which have remained in use in present day

conceptualisations of biculturalism namely, *alternation* and *fusion*. According to the authors, an

important feature of alternating is the bicultural individual's ability to choose to behave

differently in response to the cultural context. For example, Indian migrants to America preferred

Indian dress and language at home and American dress and language outside of the home. By

contrast, fused individuals have mixed and fused aspects of their two (or more) cultures into one

new culture. LaFromboise et al. regarded the alternation model as highly adaptive, leading to less

stress and greater bicultural competence.

The first empirical test of different patterns of biculturalism was a qualitative study

conducted by Phinney and Devich-Navarro (1997) in which three types of bicultural individuals

were identified: *blended*, *alternating*, and *separated*. Of these three, only *blended* and *alternating*

fit our definition of bicultural/integrated.[1] Blended individuals affirm biculturalism, are proud of

their ethnic background, see themselves as equally ethnic and mainstream, and view the two

cultures as different but compatible. Conversely, alternating individuals find it more difficult to

reconcile the two cultures. They see the cultures as more disparate, and in conflict with each

[1] Separated individuals identify with their source culture alone and share more features with

Berry's (1997) separation category of acculturation than with integration.

other. This last feature of alternating has been challenged more recently. Noels and Clément (2015) found support for the theory that immigrants who vary their identity in response to the situation or environment (i.e. alternate) develop positive and supportive relationships with members of both ethnic groups, and that this in turn corresponds with better cross-cultural adaptation.

Notably, the focus of Phinney and Devich-Navarro's (1997) study was on identifying a bicultural typology. The recent work of Ward et al. and Benet-Martinez et al. outlined above, suggests instead that the constructs blended and alternating uncover two distinct components of the bicultural *process* – albeit in different ways. The research programme of Benet-Martinez et al. is situated in the domain of personality and individual differences, whereas Ward et al.'s work is an explanation of *how* bicultural individuals manage their cultural identities.

In the same vein, the present study will also examine the processes of alternating and blending/hybridising. Taking Ward et al.'s (2017) cultural identity styles model as a starting point, I will focus on the antecedents and outcomes of the cultural identity styles, specifically, the direct effects of cultural identity styles on well-being, and the direct effects of the social context on the cultural identity styles.

Outcomes and Antecedents of Hybrid/Blending and Alternating Identities

Well-being as an outcome of the hybrid identity style. Several study programmes have examined the relationship between blended identity and well-being. As already mentioned, links have been found between BII blendedness and the hybrid cultural identity style (Ward et al., 2017). BII blendedness was found to weakly correlate with well-being (compared to BII harmony which was more strongly associated with well-being; Roccas & Brewer, 2002). In a

further line of study, Yampolsky and colleagues have developed a four-component model (Cognitive-Developmental Model of Social Identity Integration; CDSMII) to capture patterns of cultural identification (Yampolsky et al., 2013; Yampolsky, Amiot, & de la Sablonnière, 2016). One of these components, *integration*, which involves reconciling and connecting one's diverse cultural identities, was linked to greater well-being. Similarly, Ward et al. (2017) found that the hybrid style was generally associated with greater well-being outcomes, in the form of greater life satisfaction and fewer psychological symptoms. These results led the researchers to suggest that hybrid style is a more mature approach to identity integration. I hypothesise that in the present study, the hybrid style, with its theoretical and empirical overlaps with CDSMII integration, will also predict positive well-being outcomes.

Well-being as an outcome of the alternating identity style. The very term "alternating" implies change and fluctuation over time. It follows that predicting outcomes of the alternating style would be more difficult than for the hybrid style. Indeed, competing conceptualisations of alternating predict different well-being outcomes. On the one hand, LaFromboise et al. (1993) viewed alternating behaviour as adaptive, related to higher cognitive functioning, and leading to less anxiety and greater well-being. Likewise, in the identity domain, there is some evidence to suggest that varying identity according to the situation leads to positive outcomes for first generation migrants (Noels & Clément, 2015). On the other hand, alternating identities have also been theoretically linked to compartmentalisation and conflict (Roccas & Brewer, 2002). Evidence shows that conflicted identities are related to lower levels of psychological adaptation (Yampolsky et al., 2013; Yampolsky et al., 2016). In Ward et al.'s (2017) study, the alternating style was associated with negative psychological symptoms, such as worry and unhappiness. At present, there is more evidence to support links between the alternating identity style and

negative outcomes. I therefore hypothesise that the alternating style will predict negative well-being outcomes in the form of less psychological well-being and greater depression.

Contextual factors as an antecedent to the alternating identity style. Identity formation always takes place in context (Berzonsky, Cieciuch, Duriez, & Soenens, 2011). Similarly, the acculturation process is also influenced by environmental factors. Age at time of migration, generation, and the size of the difference between the culture of origin and receiving culture all lead to different integration experiences (Schwartz et al., 2010).

The socio-political context also influences the integration process. Recent cross-sectional research has found that minority groups are more willing to engage in integration processes when they perceive that diversity is valued and accommodated (Stuart & Ward, 2017). Additionally, immigrants experience less stress and greater well-being when they perceive that the wider social context is accommodating (Stuart, 2012). They may also feel more comfortable about their own identity, and freely speak their first language in public and/or the majority language at home. It follows that when the opposite is the case, for example when immigrants perceive ethnic discrimination (negative attitudes, beliefs, and interactions based on social group membership; for example, name-calling) the integration process is undermined. Clear evidence from a recent meta-analysis links perceived discrimination to adverse outcomes (Schmitt, Branscombe, Postmes, & Garcia, 2014), including increased substance use (Kulis, Marsiglia, & Nieri, 2009) and compromised mental health (Zheng et al., 2004).

A similar but distinct contextual factor, *context of reception,* has been defined as the social and economic opportunities and support available for immigrants, and the openness or hostility expressed by the local community towards immigrants (Forster, Grigsby, Soto,

Schwartz, & Unger, 2015; Portes & Rumbaut, 2005; Schwartz et al., 2014). A society in which

immigrants perceive a positive context of reception is conceptually similar to a multicultural

society as described by Berry and Ward (2016). Immigrants are welcomed and can find

employment, have access to education, and develop supportive social ties. In a negative context

of reception, immigrants are isolated, have less access to jobs and education, experience

discrimination, and perceive hostility. Perceived negative context of reception is associated with

depressive symptoms (Schwartz et al., 2014) and conduct problems (Forster et al., 2015), which

are similar outcomes to perceived discrimination. The similarities between these two variables

allow us to make predictions about negative context of reception alone (Cano et al., 2015).

Recent research found that across a sample of young adult Arabs in New Zealand, perceived

discrimination predicted increased alternating style, but not hybrid style (Qumseya, Szabo, &

Ward, 2016). I therefore hypothesise that in the present study, perceived negative context of

reception will predict increased use of the alternating identity style.

Present Study

Past research examining cultural identity styles and their antecedents and consequences

has assessed between-person comparisons in cross-sectional datasets. These analyses were

unable to capture experiences of individuals over time (Ward et al., 2017). In other words, they

were unable to capture within-person processes. There is growing recognition in the identity

studies and in psychology more generally that greater emphasis should be placed on the study of

within-person processes; this can only be accomplished with data comprising repeated measures,

such as diary data (Curran & Bauer, 2011; Hamaker, 2012; Klimstra et al., 2016).

The broad aim of the current study is to understand the processes underlying cultural

identity styles by examining isolated components of the theoretical model developed by Ward et

al. (2017). To this end, I use longitudinal data to examine the direct relationship between perceived negative context of reception and cultural identity styles, and the direct relationship between the cultural identity styles and psychological well-being over time. More specifically, I pose the following questions: On days that participants report more negativity from their cultural context do they report change in well-being? When they perceive a negative context of reception do they use the alternating or hybrid style? Conversely, do the identity styles influence negative perceptions of the social context? Finally, when participants experience changes in well-being from day to day, do they also experience changes in cultural identity styles?

One further unexamined process is between the identity styles themselves. In Ward et al.'s (2017) cross-sectional analysis the hybrid style correlated with the alternative style in a sample of Greeks living in New Zealand; however, this relationship was not significant for Chinese New Zealanders. Examining the relationship between the identity styles within individuals may provide us with new insights into whether and/or how the identity styles work in combination.

Methodological advantages of a daily diary study. This study used a daily diary approach, whereby bicultural emerging adults daily reported their perceptions of the receiving culture, what cultural identity strategies they used, and their levels of well-being and depression.

There are at least four notable advantages to this approach. First, daily diary studies are best implemented when change is likely to occur (Bolger, Davis, & Rafaeli, 2003). Identity negotiation is a fundamental psychosocial task for young people in particular (Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013), and change in their identity is almost certain. In combination, these two factors mean that a daily diary study, conducted with bicultural emerging adults, is particularly appropriate to the present research. Second, daily diary studies have high

ecological validity; they capture life as it is lived. Third, they also control for third variables by using participants as their own controls (Bolger et al., 2003). Fourth, diary designs are appropriate for examining dynamic processes because they capture the temporal sequencing of events, or fluctuations across days (Hoffman & Stawski, 2009). The reasons why people differ from one another may not be the same as those that cause a given person to differ over time. A well-known example is that a person is more likely to experience a heart attack while exercising (within-person effect), but it is also the case that people who exercise more than their peers tend to have a lower risk of heart attack (between-person effect). These two sources of variation represent two different theoretical constructs that cannot be examined with cross-sectional data (Curran & Bauer, 2011; Nezlek, 2001).

In the context of the current study, cultural identity styles are theorised as dynamic processes that will change over time (Berzonsky, 1990; Ward et al., 2017). Consequently, it is appropriate to explore them by examining within-person covariation.

Socio-political context of the present study. Miami, Florida in the United States of America (U.S.) is a unique socio-political context in which to study bicultural processes. The term *Hispanic* (often used interchangeably with *Latino*) was first used by the U.S. government for the 1970 census as an umbrella term to cover those who share Spanish as a common language. Hispanics make up 65% of the population of the Miami metropolitan region. Unlike the rest of the U.S., where Mexicans make up the majority (63%) of the Hispanic population, more than half (54%) of the Miami metropolitan area's Hispanic population is Cuban. After Cubans, the next largest groups are from Puerto Rico (6%) and the Dominican Republic (4%; Brown & Lopez, 2013).

In Miami, unlike other parts of the U.S., Hispanics, and Cubans in particular, have come to hold the majority of economic and political power. Recent reports highlight the ease and stability of life for Hispanics in Miami (e.g., Fajardo, 2016), and new Hispanic immigrants are attracted to its multicultural atmosphere (NBC News, 2014). Miami now appears to be a model multicultural city with many of the features of multiculturalism described in Berry and Ward (2016), including multi-cultural policies and practices. However, a more in-depth analysis reveals that the recent history of Cuban migration to Miami has led to different attitudes to migrants from Cuba, both within the Cuban population itself and between Cuban migrants and the wider host community (Portes & Puhrmann, 2015). Moreover, changes in U.S. government policy (e.g., the recent repeal of Cuban immigration policy; The White House, 2017), international relations, and events in the home country all influence immigration experiences, which in turn influence acculturation/bicultural processes (Schwartz et al., 2010).

As we can see from this brief example of the Cuban population in Miami, immigrants' experiences are influenced by the socio-political context. This example also provides a background to the daily experiences of the largest group of bicultural Hispanics in present day Miami. On the face of it, Miami looks like a successful multicultural environment. However, the recent history of events may influence the daily experiences of Hispanic emerging adults such that they experience more hostility and lower mental health than other groups. At other times, they may enjoy a more equitable, multicultural socio-political context. The present study can offer a valuable contribution to current knowledge about the present-day well-being of Hispanic emerging adults in Miami.

Hypotheses and Research Question

This study addresses the limitations of prior cross-sectional research on the cultural identity styles (Ward et al., 2017). As theory and empirical evidence on cultural identity styles are still in their infancy, I predict that within-person results will mirror prior between-person findings. The research hypotheses are:

1. The alternative identity style (AIS) positively predicts depression (H1a) and negatively predicts psychological well-being (PWB, H1b);
   The hybrid identity style (HIS) negatively predicts depression (H1c) and positively predicts PWB (H1d).

2. Perceived negative context of reception (PNC) positively predicts AIS (H2).

   The research questions are:

1. Are there reciprocal relationships between the cultural identity styles and well-being (depression and PWB), and PNC across days?

2. What is the relationship between AIS and HIS across days?

Method

Participants

Participants were 870 (76% female) Hispanic university students. Participants' ages ranged from 18 to 29 years ($M = 20.08$ years, $SD = 2.66$). The majority (83%) of participants lived with their parents or relatives, mostly in neighbourhoods of equal racial groups (32%), or in neighbourhoods where the majority of people were from their ethnic group (31%).

Most participants (65%) were born in the U.S. Of those born outside the U.S., 94% considered themselves to be permanently in the U.S., and had lived there an average of 12.48

years (*SD* = 5.79). Of the overseas-born participants, 39% were born in Cuba. All participants were bilingual. Ninety-one percent of participants considered themselves to be a native English speaker, while 86% considered themselves to be either fluent Spanish speakers or able to speak Spanish well.

Procedure

Participants completed a daily on-line survey for 12 consecutive days. Data collection was structured in ten subsequent cohorts of approximately 80 participants; each cohort started on a Thursday and ended on a Monday. A link to the on-line survey was sent at three a.m. each day, giving participants 24 hours to complete the survey. Participants completed the full questionnaire on Day One and Day 12. On days two to 11, participants completed shorter versions of the full-length questionnaire, with one representative item for each scale. In the current study, the full-scale measures from Day One were used as a basis for the calculation of single–item reliability only.

The present study is part of a larger body of research on identity and well-being conducted by an international team of researchers led by Seth Schwartz at the University of Miami and Alan Meca, formerly at Florida International University and now at Old Dominion University. Ethics approval was obtained through the Florida International University Institutional Review Board, and students who participated in the research received course credit.

Measures

Negative Perceived Context of Reception (PNC) measures the perception that the receiving culture is unwelcoming or limits opportunities to immigrants (Yampolsky et al., 2016). The full scale includes six items measured on a Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In the present study, the full scale Day One alpha reliability was α = .80. The

single-item, daily measure of PNC was "I don't have the same chances in life as people from other countries". The correlation between single items and their multiple-item equivalents indicates adequate convergent validity (Wanous & Hudy, 2001; Wanous & Reichers, 1996). Following Wanous and colleagues, I used the correction for attenuation formula to calculate the estimated reliability of the single item. The correlation of the single item with the full scale was r = .68. Single item reliability was r = .94.

Cultural Identity Styles were measured using the Multicultural Identity Styles Scale (MISS; Ward et al., 2017). MISS comprises two subscales: Hybrid (HIS) and Alternating (AIS) Identity Styles. Each subscale includes seven items measured on a five-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores reflect greater use of HIS and AIS respectively. In the present study reliability alphas measured on Day One were HIS α = .89; AIS α =.84. One question from each subscale was used on the ten days of the diary study: "Today, I saw myself as a culturally unique mixture of Hispanic and American" (HIS); and "Today, I alternated between being Hispanic and American depending on the circumstances" (AIS). Correlations between the single items and full scale were HIS r = .82, and AIS r =.80. Single item reliabilities were: HIS r = .97; AIS r =.88.

Psychological Well-Being was measured using the shortest version (18items) of the Ryff Psychological Well-Being scale (RPWB; Bolger et al., 2003). Items are measured on a six-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). The full scale Day One alpha reliability was α = .84. One item from the Self-acceptance sub-scale "I like most aspects of my

personality" was used as a daily measure of psychological well-being. Single item and full scale

$r = .65$. Single item reliability $r = 1.1$[2].

Depression was measured using the Centre for Epidemiologic Studies Depression scale

(CES-D; Radloff, 1977). It is a 20-item scale assessing depressive symptoms (e.g., unhappy

mood, lack of motivation, difficulty sleeping). The response scale for each item ranged from 1

(*strongly disagree*) to 6 (*strongly agree*). The full scale Day One alpha reliability was $\alpha = .86$.

The single item: "I have felt down and unhappy today" was the daily measure of depression in

the current study. Single item and full scale equivalent $r = .75$. Single item reliability was $r = .99$.

Analytic Plan

The daily diary data in the current study comprised a multilevel (or hierarchically nested)

data structure, such that observations over a period of ten days (Level 1) were nested within 870

participants (Level 2).

Each set of the ten-day diary data at Level 1 shares the same person. This violates two

statistical assumptions required for most traditional regression and SEM analyses: 1) that all

observations are independent; and 2) that all random errors are independent, normally

distributed, and homoscedastic (i.e., variance of residuals is the same). For this reason, data that

are nested in this manner must be analysed using multilevel modelling (MLM). Simply stated,

MLM is a set of equations operating at two levels simultaneously and distinctly, by providing

independent estimates of the relationship among constructs at the within-person level and

modelling them at the between-person level as a random effect (Curran & Bauer, 2011). In so

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[2] Unlike Pearson's *r,* the correction for attenuation formula may result in a coefficient greater

than 1.00 (Muchinsky, 1996).

doing, MLM incorporates the unreliability of covariances into the estimates, thereby providing a more accurate analysis (Curran, 2003; Nezlek, 2008). This device allows us to avoid Type 1 error (Nezlek, 2008; Raudenbush & Bryk, 2002; Stuart, 2012). In addition, MLM can also be extended to examine lagged effects, allowing the researcher to examine change or stability within individuals over time (Hoffman & Stawski, 2009; Selig & Little, 2012). Thus, MLMs were conducted using MPlus version 7 software (Muthén & Muthén, 1998-2012). Maximum likelihood estimation is the method automatically employed by MPlus for dealing with randomly missing data.

The analytic plan involved three phases. First, I calculated descriptive statistics including the variances, intra-class correlations (ICC), and reliability coefficients of all the variables. The reliability estimates (the ratio of true to total variance of an effect) were calculated according to the formula laid out in Raudenbush and Bryk (2002; see Appendix A). Variances and ICC were generated by an unconditional (intercept-only) model of each variable. Second, I examined within-person and between-person covariation of all the variables. Covariances were also generated using an intercept-only model. Third, to measure patterns of change, day-lagged analyses were conducted to determine whether the predictor variables predicted *residual change* in the outcome variables from one day to the next. Figure 1 depicts such a model. Following Hammond and Overall (2013) I controlled for the prior day effects of the outcome variable, as well as simultaneously including all same-day predictor variables. These results represent the unique effect of each predictor variable on residual change in the outcome variable.

All predictor variables were grand-mean centred, in which the mean from the full sample was subtracted from the grand mean of each predictor variable. The two main objectives of the day-lagged analyses were to examine: one, the antecedent effect of PNC on the identity styles;

and two, the antecedent effect of the identity styles on mental health outcomes. However, I also included PNC, SWL, and PWB as outcome variables in the lagged day analysis to consider the possibility of reciprocal relationships.
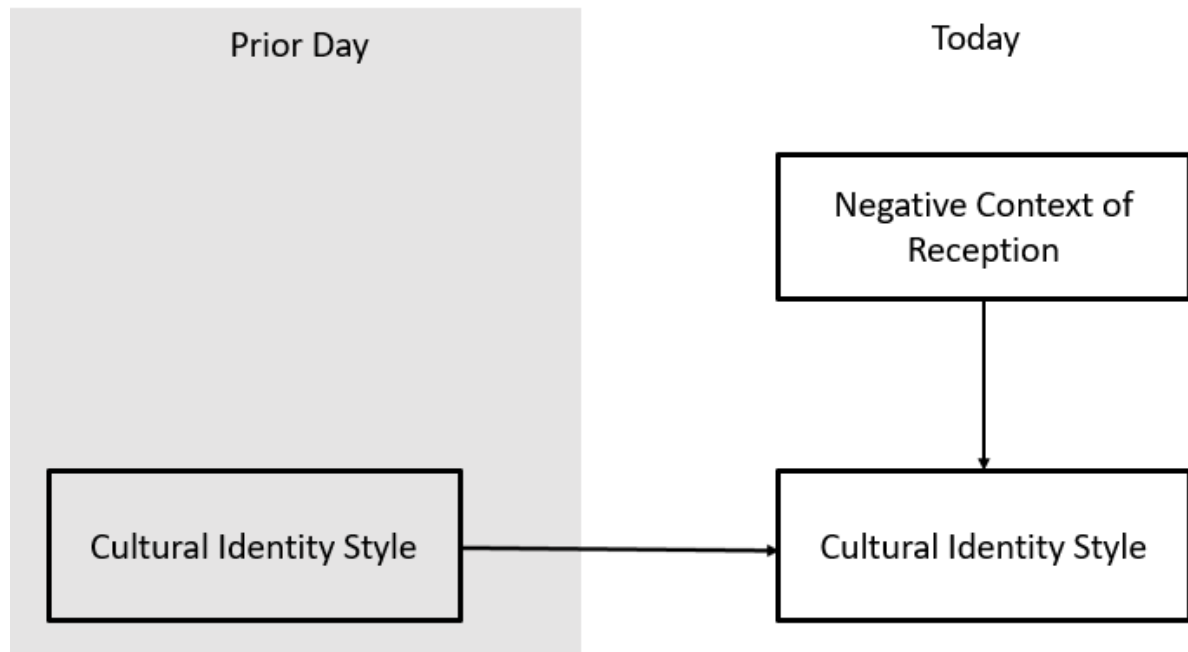
Figure 1. Present day residual effects on present day outcome.

Results

Results are reported in two sections: 1) descriptive statistics and within-time associations among variables; 2) same-day change from the day-lagged regressions. The focus of the study is primarily on daily, within-person variance. However, as previous studies of cultural identity styles have only examined between-person variance, I present not only the day-to-day changes as shown in within-level estimates, but also the relevant between-level estimates for comparative purposes.

Descriptive Statistics and Associations among Variables

Descriptive statistics and reliability coefficients of all the variables are presented in Table 1. The Intra-class Correlation (ICC) provides information about the differences in outcomes between people and the extent to which data are hierarchically differentiated (Preacher, Zhang, & Zyphur, 2011). The reliability estimates indicate that the reported estimated variances are reliable indicators of real differences.

In addition to assessing the hierarchical nature of the data, the ICC provides information about cultural identity styles and PNC thus far unexplored in acculturation literature. The ICC indicates the fraction of the total variation in the data that is accounted for by the between-person variance. For example, 57% of the variance in HIS is between-persons (the remaining 43% is within–person variance). This shows that in our sample in general, people varied more from each other in their use of HIS than one person varied within themselves over ten days. By contrast, for AIS, people in our sample differed about as much from each other as they did within themselves over ten days. Both between- and within-person variance was higher for AIS than HIS. That is, people differed more from each other in AIS compared to HIS, and there was more variation within individuals in their use of AIS compared to HIS. This finding lends support to conceptualisations of AIS as an identity style that alters and varies over time, whereas HIS, by contrast, is more stable. This pair of results also shows that more of the between- and within-person variance in AIS (c.f. HIS) can be explained by the other variables in the current analysis.

Table 1

Descriptive Statistics and Reliability of Daily Measures

Variables	Mean (SD)	Within-Person Variance	Between-Person Variance	Intra-class Correlation	Reliability
PNC	1.73 (0.78)	.54	.61	.53	.92
HIS	3.68 (0.78)	.46	.61	.57	.93
AIS	2.95 (0.88)	.71	.78	.52	.92
PWB	5.05 (0.83)	.47	.69	.59	.94
Depression	2.28 (0.80)	.81	.64	.44	.89

Note. All variance estimates are significant at $p < .001$. PNC = Perceived Negative Context of Reception, HIS = Hybrid Identity Style, AIS = Alternating Identity style, PWB = Psychological Well-being.

Table 2 presents within-person and between-person covariances. Turning first to the within-person relationship between the cultural identity styles and well-being outcomes, increased HIS was significantly related to increased PWB. Additionally, increased AIS was significantly related to increased depression. There was no significant relationship between HIS and depression, nor between AIS and PWB.

Table 2

Within-level and Between-level Covariance Matrix

	1.	2.	3.	4.	5.
1. PNC		.02*	.10**	ns	.15**
2. HIS	ns		.10**	.04**	ns
3. AIS	.20**	.26**		ns	.07**
4. PWB	-.16**	.23**	ns		-.14**
5. DEP	.38**	-.12**	.10*	-.42**	

Note. Between-person covariances are displayed below the diagonal. PNC = Perceived Negative Context of Reception, HIS = Hybrid Identity Style, AIS = Alternating Identity style, PWB = psychological well-being, DEP = Depression. **$p < .001$, $^*p < .01$.

Next, we turn to the within-person relationship between PNC and other variables. I observed a significant positive relationship between PNC and the cultural identity styles (HIS and AIS respectively). Although no hypotheses were formed about PNC and well-being outcomes, the relationship between PNC and well-being variables converge with prior findings (Schwartz et al., 2014). Greater PNC was significantly related to less PWB, and greater PNC was significantly related to greater depression.

In combination, between-person and within-person covariances present us with a novel picture of the cultural identity styles as they relate to well-being and PNC. However, the longitudinal rather than the cross-sectional results are the primary focus of this study, and similar patterns of relationships are also found in the day-lagged analyses.

Day-lagged Regressions

Next, I conducted lagged day analyses to examine patterns of day to day change. As outlined in the analytic plan, this set of models tested whether *residual change* could be predicted by our variables of interest. In each instance, I controlled for the prior day effects of each outcome variable, as well as simultaneously including all same-day predictor variables. Results represent the unique effect of each predictor variable on residual change in the outcome variable. The primary objectives were to consider change in identity styles as predicted by PNC and change in well-being as predicted by identity style. However, I also included the identity styles as outcome variables in the lagged day analysis to examine the possibility of inverse relationships.

Cultural identity styles as predictors. Within-level parameter estimates of the day-lagged associations between the cultural identity styles and three other variables as outcomes are shown in Table 3.

Table 3

Within-level Results of Prior-Day Lagged Analyses with Cultural Identity Styles as Predictors

					95% CI	
Outcomes	Predictors	*B*	*SE*	*p*	Lower	Upper
DEPR	DEPR_PD	0.16	0.02	< .001	0.12	0.21
	HIS	-0.04	0.03	ns	-0.10	0.01
	AIS	0.09	0.02	< .001	0.06	0.13
PWB	PWB_PD	0.20	0.03	< .001	0.15	0.25
	HIS	0.10	0.02	<.001	0.07	0.13
	AIS	0.02	0.01	ns	-0.01	0.04
PNC	PNC_PD	0.14	0.02	< .001	0.09	0.18
	HIS	0.03	0.02	ns	-0.01	0.08
	AIS	0.12	0.02	< .001	0.08	0.15

Note. HIS = Hybrid Identity Style, AIS = Alternating Identity style, PNC = Perceived Negative

Context of Reception, PWB = Psychological Well-being.

Three separate regression equations were analysed as described above. After controlling

for the prior day effects of depression on present day depression, and holding between-person

mean AIS constant, for every unit increase in AIS, there was an increase in depression of about

one tenth. Controlling in the same manner as above, AIS did not significantly predict PWB and

HIS did not significantly predict depression across days, thus Hypotheses 1b and 1c were not

supported. The significant predictive influence of AIS on depression (H1a), and HIS on PWB

(H1d) appear to support hypotheses. However, as can be seen when Tables 3 and 4 are examined in combination, these relationships were reciprocal. I shall address this point alongside results for the Research Question 1 below.

Cultural identity styles as outcome variables. Parameter estimates of the day-lagged associations between predictor variables and cultural identity styles as outcomes are shown in Table 4. Two separate regression equations were analysed as described above, with HIS and AIS as outcome variables respectively. Since all predictor variables were included in the regression equation simultaneously, I was able to control for predictive effects of each variable on the outcome.

Turning to the last of our hypothesised relationships, results in Table 4 reveal that PNC did indeed predict increased AIS (H2).

Table 4

Within-level Results of Prior-Day Lagged Analyses with Cultural Identity Styles as Outcomes

Outcomes	Predictors	*B*	*SE*	*p*	95% CI Lower	Upper
HIS	HIS_PD	0.12	0.02	< .001	0.08	0.17
	PNC	0.03	0.02	ns	-0.00	0.07
	Depression	-0.01	0.01	ns	-0.04	0.02
	PWB	0.09	0.02	< .001	0.06	0.13
	AIS	0.15	0.02	<.001	0.12	0.18
AIS	AIS_PD	0.13	0.02	< .001	0.09	0.17
	PNC	0.14	0.02	< .001	0.10	0.18
	Depression	0.06	0.02	< .001	0.03	0.09
	PWB	0.04	0.02	ns	0.00	0.07
	HIS	0.23	0.02	<.001	0.19	0.27

Note. HIS = Hybrid Identity Style, AIS = Alternating Identity style, PNC = Perceived Negative Context of Reception, PWB = Psychological Well-being.

Reciprocal relationships- Addressing the research questions. A graphic representation of reciprocal relationships is presented in Appendix C. Results showed that there were indeed three reciprocal relationships between AIS and depression, HIS and PWB, and AIS and PNC. On days when bicultural individuals experienced increased depression, they also used more of the alternating style, and vice versa, when they increased use of alternating style they experienced more depression. Likewise, on days when bicultural individuals experienced increased well-being, they also increased use of the hybrid style, and conversely when they increased use of the hybrid style they experienced greater well-being. Additionally, when bicultural individuals perceived that their social surroundings were hostile and unwelcoming, they used the alternating identity style more; increased use of the alternating style, in turn, led them to perceive the social context as more negative. In combination, the within-level results only partially supported my hypotheses and Research Question 1 was affirmed. Additionally, results showed that AIS and HIS both predicted change in the other (thus affirming Research Question 2).

Comparing within- and between-level results. Differences between the between- and within-level results enrich our understanding of the cultural identity styles and underscore the advantage of conducting both levels of analysis. Notably, between-person results reveal a pattern more consistent with the hypotheses, which were, in turn, based upon prior research conducted at the between-person level. In addition to the between-level results reported in the text below, reciprocal between-level relationships for day-lagged analyses are shown in Table 5.

Table 5

Between -level Reciprocal Relationships of Prior-Day Lagged Analyses

Outcomes	Predictors	*B*	*SE*	*p*	95% CI Lower	Upper
HIS	PNC	-0.16	0.04	< .001	-0.24	-0.07
PNC	HIS	-0.21	0.03	< .001	-0.26	-0.15
HIS	PWB	0.21	0.04	< .001	0.13	0.30
PWB	HIS	0.29	0.04	<.001	0.21	0.37
AIS	PNC	0.21	0.04	< .001	0.13	0.30
PNC	AIS	0.25	0.03	< .001	0.20	0.31
HIS	AIS	0.27	0.04	<.001	0.19	0.34
AIS	HIS	0.36	0.04	<.001	0.27	0.44

Note. HIS = Hybrid Identity Style, AIS = Alternating Identity style, PNC = Perceived Negative

Context of Reception, PWB = Psychological Well-being.

In the following section, it is important to distinguish between average levels of a

variable for the group (between-person), and for an individual (within person). In the former

case, I will say, e.g., that the level of a variable is above (or below) *group average*. In the latter

case, I will say, e.g., that the level is above (or below) the person's *individual norm.*

In the cases of AIS and PNC, HIS and PWB, and AIS and HIS we see the same effect at

both between-person and within-person levels. Prior research showed that those who used the

hybrid style more than the group average experienced greater well-being (Ward et al., 2017). In

addition to supporting this finding, the present results also show that those who use the hybrid style more than their individual norm also experience greater well-being.

By contrast, some findings were only significant at the between-person level, but not at the within-person level. Only those who used the alternating style more than the group average experienced less well-being (PWB decreased -.08 units, $p = .006$ for each unit of AIS) and only those who used the hybrid style more than the group average experienced less depression (depression decreased .23 units, $p < .001$, for each unit of HIS). These same relationships were not significant within individuals, suggesting that daily changes in the cultural identity styles only have an impact on well-being and depression when use is higher than the group average. In other words, being a person who alternated more decreased well-being, and being a person who hybridised/blended more led to decreased depression. However, at any given time, these relationships were not significant. A similar relationship was observed between the hybrid style and perceived context of reception. Only those who used the hybrid style more than the group average perceived the context as less negative, and vice versa.

Finally, another similar case was found for the comparison between within- and between-level results for the alternating style and depression. Results suggest that, as hypothesised, the alternating style did lead to greater depression, but only when an individual uses the alternating style more than the group average. These results may mean that we can conceive of a cycle between depression and the alternating style that maintains its own equilibrium from day to day until a person uses the alternating style more than the group average. At that point, the relationship becomes a clear one-way path from the alternating style to depression.

Discussion

This study aimed to build on cross-sectional research on the hybrid and alternating cultural identity styles, which are decision-making strategies used by bicultural individuals to manage their cultural identities during the process of acculturation. Taking the work of Ward et al. (2017) as a starting point, I examined both the social antecedents and the well-being outcomes of the cultural identity styles. Additionally, I explored the reciprocal relationships between these variables, as well as between the cultural identity styles themselves. Day-lagged analyses using MLM were conducted on daily diary data collected in the multicultural metropolitan area of Miami, Florida.

As hypothesised, negative perceptions of the social context did indeed influence use of the alternating identity style for bicultural individuals across days. However, the alternating identity style, in turn, also influenced negative perceptions of the social context. Further, as hypothesised, the alternating identity style predicted increased depression, but depression also predicted greater use of the alternating style. Similarly, as hypothesised, when individuals used the hybrid style more, they reported increased psychological well-being, but when they experience greater well-being, they also used the hybrid style more. This study also uncovered an additional unanticipated result. The cultural identity styles predicted each other in a bidirectional relationship.

Differences between the cultural identity styles. The hybrid identity style results described above supported prior research. Earlier studies also found that the hybrid style was linked to increased well-being, as was an overlapping construct, CDSMII integration (Ward et al., 2017; Yampolsky et al., 2013; Yampolsky et al., 2016). In addition, however, the results of

the current study created a more nuanced picture of how the hybrid style works on an individual

level, suggesting that daily use of the hybrid style is both influenced by and increases well-being.

By contrast, the hybrid style was not linked to depression within individuals. This is a similar

outcome to that of Ward et al. (2017) who found that the hybrid style, while linked to life

satisfaction, was unrelated to psychological symptoms between individuals for Greek and

Chinese migrants in New Zealand. By combining the self-acceptance subscale of psychological

well-being with a measure of depression in a single study, this study showed that the hybrid style

was clearly related to the self-acceptance component of well-being for a bicultural individual

across days, but it was not necessarily related to depressive mood. Further evidence showed that

the hybrid style was related to well-being through a consolidated sense of identity (Ward et al.,

2017). Thus, the hybrid style may be more closely related to the cognitive act of self-evaluation

than to mood and emotion.

Compared to the hybrid style, the alternating style appeared to be less related to

evaluative cognitive processes and more to emotion and mood. The detrimental cycle between

depression and the alternating style was consistent with prior findings (Roccas & Brewer, 2002;

Ward et al., 2017; Yampolsky et al., 2013; Yampolsky et al., 2016). It was also consistent with

the link found by Ward et al. between the alternating style and low BII harmony, which has in

turn, been linked to depressive symptoms (Huynh, Nguyen, & Benet-Martínez, 2011).

However, despite these clear links between the alternating identity style and negative

emotion, there is also past and present evidence for a link between the alternating identity style

and cognitive processes. First, prior studies have also found that one pathway that leads the

alternating style to increased depression passes through a sense of conflicted identity (Ward et

al., 2017). Identity conflict has been linked to psychological adaptation problems in prior studies

(Ward, Stuart, & Kus, 2011). A second respect in which the alternating style is linked to cognitive processes can be seen in the day-to-day reciprocal relationship between negative perceptions of the social context and the alternating style. The alternating identity style, more than the hybrid, alters how bicultural individuals perceive their social environment. This was the case even in the relatively multi-cultural environment of Miami, where mean use of the cultural identity styles were largely similar to the New Zealand samples (Ward et al., 2017). As this similarity might lead us to expect, the present study found that the socio-political environment of Miami remains conducive to well-being. However, even in this environment, characterised by high levels of well-being compared to depression, greater use of the alternating style was still reciprocally related to perceptions of hostility. This may be because perceptions of a hostile environment are exacerbated by use of the alternating style, since differences between cultures, and the various responses that society may have towards perceived outsiders (racism, hostility, discrimination) may be more salient when the alternating style is activated.

The dual relationships between the alternating style on the one hand, and depression and perceptions of a hostile social environment on the other, further support prior research that the alternating style is less stable than the hybrid style, and possibly less adaptive. Specifically, it is more sensitive to negative antecedents and leads more readily to negative outcomes than the hybrid style. When the alternating style is activated, people have more of an outward focus, they are more influenced by the social context, and by their emotional responses to it.

The present study goes some way to answering a longstanding question in the literature. Are both styles strictly *identity* styles, or does the alternating construct capture behaviour alone (Benet-Martínez, 2012; Huynh et al., 2011)? Ward et al. (2017) examined exactly this question and found evidence that discriminated alternating identities from alternating behaviours.

However, their results have yet to be replicated. Moreover, the authors found there was still a

considerable overlap between identity (measured by AIS) and behaviour (measured with an

alternating behaviour scale).

The fact that uncertainty remains about this question requires us to consider various

scenarios that may explain the results of Ward et al. One of the ways that the identity styles may

help bicultural individuals manage their cultural identities is through recognising and responding

to perceived or actual external events in their social environment. As such, an individual's sense

of identity and behaviour may be altered to avoid psychological discomfort or harm, in the

context of their environment. For example, if bicultural individuals perceive the external

environment as hostile, they may change their behaviour (e.g. attempt to mask their accent) to

avoid being stereotyped, and this change in behaviour may come at the cost of internal

confusion. On the other hand, when bicultural individuals feel welcomed in their environment,

they have no need to change their behaviour or alter their sense of self, and therefore are more

likely to achieve a consolidated identity. A third scenario is also possible: A person may choose

to alter behaviour, but still maintain a blended sense of self. This very scenario has been

described before in the acculturation literature (van Oudenhoven & Benet-Martínez, 2015;

Yampolsky et al., 2016). Indeed, integration, as conceptualised in the CDMSII, is maintaining a

feeling of internal coherence between identities while simultaneously adjusting behaviour to

each cultural context in order to be socially effective. It follows that if bicultural individuals alter

their behaviour, they may maintain a blended sense of self (and also greater well-being), but if

they experience altered identity this may lead to decreased well-being. The bidirectional

relationships between the alternating identity style and depression and negative context of

reception presented here suggest that when the environment is perceived as more negative than usual this activates not only alternating behaviour but the alternating identity style as well.

Reciprocity of the cultural identity styles. Ward et al. (2017) originally conceived of the two cultural identity styles as: independent from each other; activated differently depending on contextual factors and personal preferences; operating singly or in combination; and both equally accessible to acculturating individuals. In addition, results of the present study suggest that the two styles also mutually influence one another; when individuals engage either one of the two identity styles, they will also use the other.

Fluctuation between identity processes such as those presented here has been found in identity research with adolescents. Klimstra et al. (2010) found day-to-day fluctuation between two key dimensions of identity formation (identity commitment/certainty and reconsideration/uncertainty). These constructs are grounded in Eriksonian theories of identity formation and have a degree of conceptual overlap with cultural identity consolidation and cultural identity conflict, constructs that have been found to mediate the relationship between cultural identity styles and well-being (Ward et al., 2017). In light of the bi-directional influence between the hybrid and alternating styles as uncovered by the present study, the two styles are perhaps best conceptualised not as either/or strategies for negotiating cultural identity, but as strategies that work in tandem. Like two human legs, they are both necessary on an ongoing basis to keep the cultural identity negotiation process in balance. In support of this, results showed that even on days when the alternating style is associated with increased depression and negative perceptions of reception, it is also associated with the hybrid style, which is in turn associated with greater psychological well-being. Extrapolating from this full, dynamic picture of the cultural identity styles, I propose that the opposing conceptualisations of the alternating

style (as either adaptive vs. maladaptive) can both be included in a larger dynamic model. Such a model would allow for the associations between the alternating style and negative outcomes (more depression and negative perceptions of the social environment), but its strong reciprocal relationship with the hybrid style makes it adaptive nonetheless. This description adheres to the theory that adaptive identity formation processes aim toward integration and coherence (Erikson, 1968).

Further support of this argument may be found in social identity complexity theory (Roccas & Brewer, 2002). Complex social identity involves greater levels of integration and matches descriptions of the hybrid identity style. Complex social identity requires greater cognitive strategies and resources, such as awareness of more than one ingroup categorisation, and recognition that the multiple ingroups do not converge. Reconciling the incongruences between ingroups, like resolving cognitive dissonance, requires cognitive resources such as effort and attention. Cognitive overload may affect accessibility of information resulting in a temporary reduction of social identity complexity. The reciprocal relationships that we see in the results of this study could be interpreted such that when individuals with high complex social identities experience cognitive challenges such as hostility or depression, they may temporarily switch to a less complex identity. Results from this study go some way to demonstrating *how* this strategy is adaptive. Although the less complex alternating style was activated by depression or perceptions of hostility, it was also activated by the hybrid style. The hybrid style's reciprocal relationship with well-being restores the individual, momentarily, to a sense of well-being.

It is challenging to find a model that fully explains the reciprocal relationships found in this study. More complex theories such as the complex dynamic systems perspective recently proposed by Kaplan and Garner (2017) take reciprocal relationships into account. This approach

overlaps with the Relational-Developmental Systems perspective (Overton, 2013) and regards causality (in processes such as identity) as multidirectional or circular, and all individual and contextual relationships as mutually influential. Of relevance to the dynamic relationship between the cultural identity styles is the concept that when connections between the central elements of a system are in a positive feedback loop, the triggering of one element positively activates the other, resulting in change toward a state of equilibrium. As I have already suggested, this may be the case for the hybrid and alternating styles. This theoretical perspective, while promising, is complex and will be difficult to operationalise.

In sum, results showed that the hybrid and alternating style were mutually influential. They fluctuated in a manner similar to another identity construct: certainty and uncertainty. Results go some way towards solving the alternating style debate, by showing that even if the alternating style was triggered by negative events, and lead to negative outcomes, its relationship with the hybrid style brought a bicultural individual back into equilibrium. That is, the alternating style *is* adaptive in hostile situations, but only in combination with the hybrid style.

Contributions, Strengths, and Limitations

This study has contributed to the field of acculturation studies in two important ways. First, in general, results converge with prior studies (especially between-level results). As theorised, the hybrid style is characterised by stability and certainty, unaffected by changes in the social context and related to positive well-being outcomes. On the other hand, the alternating style has less stable characteristics. It influences how a person perceives their environment as well as being affected by negative perceptions of the environment. Perceived negative context of reception also positively covaries with depression. This finding has important implications for

the receiving society and for education and interventions. Bicultural individuals may be aided by a more in-depth understanding of the impact of the cultural identity styles.

Second, this study presents intraindividual differences in the cultural identity styles for the first time. Differences in within- and between-level results demonstrate the importance of examining the cultural identity styles in this manner. MLM analysis of diary data has allowed me to make novel comparisons between within- and between- individual levels. The risk of self-presentation bias was lessened because multiple reports of variables of interest were recorded. Naturally occurring fluctuations across days gave our data high ecological validity. Additionally, the daily diary data collection minimised retrospective bias, because participants recorded what happened in recent memory.

Despite its contributions and strengths, this study has several limitations. We have learnt how cultural identity styles function longitudinally in Hispanic university students in Miami. However, the results of this study cannot be generalised across all cultural groups, and all socio-political settings. Likewise, although emerging adulthood is an important time for capturing change in identity formation (Schwartz, Côté, & Arnett, 2005), it is not wise to only focus on cultural identity processes in university students. Therefore, further studies should be conducted with migrants of different ages and occupations. Future studies should also examine the cultural identity styles and perceived negative context of reception in receiving societies that have not been built on immigration and may be less multicultural (e.g. Germany). Bicultural participants from more distant cultural backgrounds (e.g. Indian, Haitian) should also be included in future studies.

Despite reducing participant burden and yielding converging results with studies using full measures, the single-item measures used in the daily diary data collection may limit

construct validity. In particular, the alternating identity style item may increase the likelihood of capturing alternating behaviour rather than *identity*, which is an important distinction in Ward et al.'s (2017) theory. It will also be necessary to examine antecedents and consequences of each of these constructs.

The complete model proposed by Ward et al. includes cultural identity consolidation and identity conflict. I was unable to examine the model in its entirety in this study. Further studies using Ward et al.'s full conceptual model are necessary to understand the relationship between the overlapping Eriksonian constructs of identity consolidation/conflict, commitment/reconsideration, and the cultural identity styles.

Although the longitudinal design involves a time interval between hypothesised predictors and outcomes, strictly speaking it does not allow conclusions about causality. For instance, an effect of a predictor on an outcome variable might also be due to the influence of an unmeasured third variable.

Implications and Future Studies

Despite the study limitations, these results may have implications for intervention development, and for cultural competency training. As we have already seen, the hybrid style is related to greater well-being on a daily basis, and less depression when it is used more than the group average. Therefore, encouraging greater use of the hybrid style may be a useful means of increasing well-being. Since there is no direct relationship between depression and the hybrid style at any given time (within individuals), more research is necessary to understand what third variables may be at play before we can determine *how* the hybrid style eases depression. Additionally, the process that leads to increased use of the hybrid style is not yet fully understood. As Ward et al. (2017) found, the hybrid style is related to identity consolidation,

which in turn is formed through a set of complex identity development processes. Perhaps the

most useful interventions would come in the form of education. Promotion of biculturalism in

immigrants via increasing comfort with heritage and receiving cultural practices, values, and

identifications, potentially leads to greater well-being (Schwartz et al., 2015). Promoting

biculturalism in receiving society members may also go some way to reducing perceptions of a

hostile environment. Most importantly, results from this study show the importance of

normalising the different strategies already in use by bicultural individuals. It appears, from past

and present results, that bicultural individuals spontaneously switch from one cultural identity

style to the other (Doucerain, Dere, & Ryder, 2013; Noels & Clément, 2015) thus maintaining

their own balance and well-being.

I have already suggested above some possible future studies, but it is possible to identify

several other important directions for further research. Existing empirical evidence already

suggests that daily fluctuations in identity are predictive of longer term change (Becht et al.,

2017). Likewise, I expect that the daily fluctuations observed in the cultural identity styles will

also predict long-term change. Studies should be conducted to examine systematic change, as

well as the cumulative effects of the identity styles over extended time periods (e.g. across the

lifespan).

Narrative identity studies will complement quantitative studies such as the present one,

since they provide a fully contextualised study of identity process and content, and the

relationship between the two. Broadly, narrative identity approaches draw on qualitative methods

to study people's life stories. These approaches maintain that identity emerges out of a reflective

consideration of one's life story, ability to integrate that life story into a coherent account, and

ability to make meaning out of life events (e.g., Bruner, 1987, 1991; McAdams, 2011). Seaman,

Sharp, and Coppens (2017) provide a useful outline for how to integrate the narrative identity approach with existing identity research.

Future studies that differentiate identity domains may also uncover some of the complexities of the cultural identity styles. Recent identity research shows that different levels of identity commitment have been found in the domain of education (the area of life involving school and education), compared to the domain of interpersonal relationships (friendships etc.; Becht et al., 2017). Some may compartmentalise identity domains such as family life and friendships so that they do not intersect, while others may find ways to explain the intersections between different domains of their lives (Galliher, McLean, & Syed, 2017). Indeed, integrative complexity is domain specific (Roccas & Brewer, 2002). Thus, a person who struggles with complexities in one domain (e.g. practices) may nonetheless be integrated in another domain (e.g. intellectual self-complexity).

Conclusion

People who live in two or more cultures manage their cultural identities in different ways depending on factors such as the external environment, life experiences, and personality. It is well accepted that integration of multiple cultural identities leads to the best outcomes for bicultural (or multicultural) individuals. However, less is known about how bicultural individuals integrate their multiple cultural identities. This study has contributed to the field by demonstrating that two strategies for managing cultural identities (alternating and hybrid) are influenced differently by perceptions of a hostile environment. In addition, the alternating and hybrid styles are each associated with different well-being outcomes. The reciprocal relationship found between the hybrid and alternating style suggests that the two styles work in tandem, and

equally contribute to the process of integration. Just how the cultural identity styles work

together is a task for future studies.

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Appendix A

Formula for calculating reliability estimates from Raudenbush & Bryk (2002).

$$\lambda = \frac{\sigma_B^2}{\left[\sigma_B^2 + (\sigma_W^2 / n_j)\right]} \ .$$

Reliability estimate   = $\dfrac{\text{Btw-person variance}}{\text{Btw-person variance} + (\text{W- person variance/ No. of days})}$

Appendix B

Appendix B presents an example of a model examining the effects of prior day variables on the

present day (an example of this model can be found in Jose & Lim, 2015). This initial set of

analyses yielded no significant change, thus a further model depicted in Figure 1 was tested.
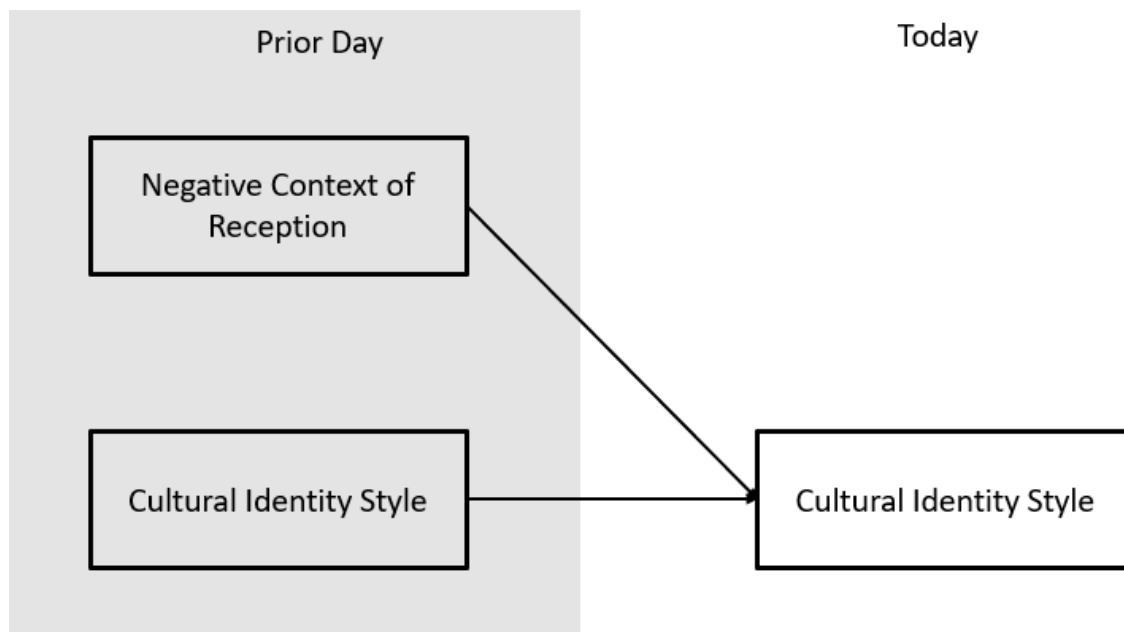
Appendix C

Appendix C depicts the reciprocal relationships found in this study between the cultural identity

styles (the hybrid identity style, HIS; and the alternating identity style, AIS) well-being (PWB)

depression (DEP) and perceived negative context of reception (PNC). A significant reciprocal

relationship between PNC and DEP, was also observed, but did not form part of the present

study.