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Wakefield, Juliet; Sani, Fabio; Herrera, Marina

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**Greater University Identification – But not Greater Contact - Leads to More Life Satisfaction:  
Evidence from a Spanish Longitudinal Study**

Juliet R. H. Wakefield

Nottingham Trent University, England, UK

Fabio Sani

University of Dundee, Scotland, UK

Marina Herrera

University of Valencia, Spain

Author Note

Juliet R. H. Wakefield, Department of Psychology, Nottingham Trent University, +441158485518; Fabio Sani, School of Social Sciences, University of Dundee, +441382384628, f.ani@dundee.ac.uk; Marina Herrera, Department of Social Psychology, University of Valencia, +34.96.3864571, marina.herrera@uv.es.

Correspondence concerning this article should be addressed to Juliet Wakefield, Department of Psychology, Nottingham Trent University, 50 Shakespeare Street, Nottingham, NG1 4FQ, UK.

Email: juliet.wakefield@ntu.ac.uk

Telephone: +44 115 8485518.

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**Greater University Identification – But not Greater Contact - Leads to More Life****Satisfaction: Evidence from a Spanish Longitudinal Study****Abstract**

**Background:** A growing body of literature has highlighted the relationship between *group identification* (a subjective sense of belonging to one's social group, coupled with a subjective sense of commonality with the group's members) and wellbeing. However, little of this work is longitudinal, and few studies address reciprocal causality or control for intensity of contact with fellow group members.

**Method:** We investigated the effect of university identification on satisfaction with life (SWL) over time (and vice versa) in 216 Spanish undergraduates, with seven months between T1 and T2.

**Results:** While greater university identification T1 predicted higher SWL T2, SWL T1 did not predict university identification T2. University contact T1 was unrelated to SWL T2.

**Conclusions:** These results show that university identification impacts positively on SWL over time (rather than SWL impacting positively on university identification over time), and this is not reducible to the effects exerted by university contact. The implications for those who work with students are discussed.

**Keywords:** Group Processes; Social Identity, Well-being; Life Satisfaction; Social Support, Student

## Introduction

There is a growing body of evidence from numerous scientific disciplines (e.g., psychology, sociology, epidemiology, anthropology) which supports the idea that membership of social groups (e.g., family, community, religious group, hobby group) satisfies a core human need (e.g., Tomasello, 2009). Indeed, some have suggested that such group memberships are vital for our wellbeing, and that the absence of such connections can have significant negative repercussions for both mental and physical health (Jetten, Haslam, & Haslam, 2011).

Much of this work quantifies these memberships in terms of *social integration*: the number of groups of which one is a member, or the frequency with which one interacts with fellow members of these groups (Cohen, 2004). Research in this domain revealed that socially integrated individuals tend to be happier, healthier, and to live longer than their less integrated counterparts (e.g., Berkman, Glass, Brissette, & Seeman, 2000; Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997). Such effects are hypothesised to be due to the increased sense of meaning and purpose in life afforded by social integration, as well as knowing others will be there to provide support during times of crisis (e.g., Putnam, 2001; Uchino, 2004).

Not all of the work carried out in this domain has supported the predicted positive relationship between social integration and wellbeing, however. Some researchers found no relationship, while others even found a negative relationship (see Schwarzer & Leppin, 1991). Attempting to reconcile these inconsistencies, Haslam, Reicher, and Levine (2011) note that there is a significant limitation with the concept of social integration: it is based upon the assumption that intense social contact (e.g., frequent interactions with group members, or the attendance of many group-related events) is the foundation of a socially integrated (and thus happy) life. In other words, the focus is upon the quantitative or objective aspect of group membership. Although aspects such as interaction frequency are

undoubtedly important, the concept of social integration neglects a key aspect of group life: the qualitative or subjective dimension (e.g., how does it *feel* to belong to the group in question?; see Sani, 2011). As Haslam et al. (2011) note, having a great deal of contact with a group with which one enjoys spending time is indeed likely to promote wellbeing. However, if one must spend time with a group about which one feels indifferent (or even actively dislikes), then wellbeing is far less likely. Indeed, illness might be a more common outcome: a conclusion that Haslam et al. (2011) use to explain the inconsistent results observed in the social integration literature.

This subjective aspect of group life can be conceptualised as *group identification*: the extent to which one feels a sense of belonging to the group, coupled with a sense of commonality with the group's members (Sani, Madhok, Norbury, Dugard, & Wakefield, 2015a, 2015b). Group membership and group identification are thus very different concepts: one can be a member of a group without experiencing any sense of identification with that group (Haslam et al., 2017). It is this subjective concept of group identification that we explore in the present study.

The social identity approach within social psychology (the discipline from which the concept of group identification originated) posits that individuals belong to multiple social groups, and "that groups are not only external features of the world, but are also internalized so that they contribute to a person's sense of the self" (Haslam, Ellemers, Reicher, Reynolds, & Schmitt, 2010, p. 341). These internalized group memberships are thus consequential for individuals' thoughts and behaviour (e.g., Tajfel, 1981). Researchers working within this tradition have highlighted the relationship between group identification and numerous positive outcomes, including reduced depression, anxiety, and stress (Cruwys et al., 2013; Sani et al., 2015b; Steffens, Haslam, Schuh, Jetten, & van Dick, 2016; Wakefield, Bickley, & Sani, 2013), increased self-esteem (Jetten et al., 2015), better physical health (Khan et al.,

2016; Wakefield, Sani, Herrera, Khan, & Dugard, 2016), and healthier behaviour (Miller, Wakefield, & Sani, 2015; Sani et al., 2015a). Importantly for this study, there is also increasing evidence to suggest that group identification can enhance one's satisfaction with life.

### **The Relationship Between Group Identification and Satisfaction With Life**

Satisfaction with life (SWL) is a key aspect of subjective well-being (Lucas, Diener, & Suh, 1996). Diener, Emmons, Larsen, and Griffin (1985) note that a major advantage of using SWL to measure wellbeing is that the respondent is able to select the criteria to include (and can choose the relative weightings of those criteria) in their assessment of overall life satisfaction (e.g., health, money, social life, career, relationships, etc.).

A number of studies have highlighted the relationship between group identification and SWL. For instance, Sani et al. (2012) found that family identification in a sample of Polish people (Study 1) and army unit identification in a group of soldiers (Study 2) both significantly predicted SWL, even after age, education level/army rank, and extent of contact with group members were controlled for. Similarly, in a large cross-cultural study involving Scottish and Italian participants, Wakefield et al. (2017) found that higher identification with each of three separate groups (the family, the local community, and a third social group of the participant's choice) predicted higher SWL. Furthermore, the authors obtained an additive effect: a positive relationship between the number of these three groups with which participants identified and their SWL. These results were obtained even after controlling for age, gender, nationality, employment status, and the extent of participants' contact with each group.

Group identification has also been found to enhance SWL during life transitions. Haslam, O'Brien, Jetten, Vormedal, and Penna (2005, Study 1) found a positive correlation

between identification with family/friends and SWL in participants going through the stressful process of recovering from heart surgery. Moreover, the social support obtained from these groups was found to mediate the group identification-SWL relationship. Similarly, Iyer, Jetten, Tsivrikos, Postmes, and Haslam (2009, Study 2) recruited individuals who were just about to begin studying at university, and found that participants who possessed many group memberships one month before beginning their studies tended to identify more strongly as students two months into term, and that this strong student identification predicted high levels of SWL. Group identification thus seems to play a key role in allowing people to maintain a sense of wellbeing during important life events.

Related to this, group identification has also been shown to promote SWL during times of adversity. Recruiting a sample of South Asian Canadians (a group at risk of racial discrimination), Outten and Schmitt (2015) found a positive relationship between ethnic group identification and SWL, and also concluded that this relationship was mediated by perceptions of the group's ability to cope with discrimination through collective action. Group identification can thus be an important strategy for coping with the unhappiness caused by prejudice and discrimination, and can allow such individuals to feel more satisfied with their lives.

Although the discussion above indicates that various researchers have explored the relationship between group identification and SWL, many of these studies suffer from a number of significant limitations. Perhaps most importantly, few studies have utilized a longitudinal design, which means there is little evidence to indicate whether greater group identification leads to better SWL, or vice versa. Although Iyer et al.'s (2009) research did involve a longitudinal design, the authors measured student group identification and SWL at the same time-point (two months after term started).

Other studies featuring longitudinal designs have additional limitations: for instance, Haslam, Cruwys, Haslam, Dingle, and Chang (2016) assessed participants' wellbeing before (Time 1) and after (Time 2) they engaged in Groups4Health (G4H), a program designed to improve social connection. Although they found that SWL did not improve between Time 1 and Time 2 (even though depression, anxiety, stress, and self-esteem did), they did find that increased identification with the G4H group and increased identification with multiple social groups between Time 1 and Time 2 predicted improvements in SWL. Nonetheless, the study was intended to examine how changes in identification over time brought about by G4H impacted upon SWL (rather than examining how identification at Time 1 impacted upon SWL at Time 2). Moreover, reciprocal causality (i.e., whether Time 1 SWL impacts upon Time 2 group identification) was not explored, and, furthermore, since G4H involves regular meetings (and thus group contact is key to the program), it would not have been possible to examine the relationship between identification and SWL while controlling for group contact.

Exploring student identity (the same identity investigated in the present study), Cruwys, Greenaway, and Haslam (2015) recruited students finishing university and employed a longitudinal design in order to investigate changes in wellbeing between Time 1 (just after they had submitted their dissertation) and Time 2 (one month later, after just receiving their results). However, the authors explored the extent to which possessing multiple group *memberships* (not multiple group identifications) predicted Time 2 SWL. Greenaway et al. (2015, Study 3) also explored the wellbeing of students between Time 1 (just after they had submitted their dissertation) and Time 2 (one month later). The authors found that perceived personal control at Time 2 mediated the positive relationship between student identification at Time 2 and SWL at Time 2. However, they did not find a relationship between Time 1 student identification and Time 2 SWL. Moreover, the authors did not explore the possibility



of reciprocal causality, and they did not control for the extent of contact that participants had with fellow group members (i.e., other students).

### **The Present Study**

The present study is intended to complement and extend the literature by investigating the effects of group identification on SWL while addressing all of the limitations above. First, the study is longitudinal, and is designed to investigate the effect of Time 1 university identification on Time 2 SWL in undergraduate students: a group known to experience high levels of stress (e.g., Ross, Niebling, & Heckert, 1999). Second, the possibility of reciprocal causality will be considered. Third, this study investigates the extent to which within-group contact at Time 1 independently predicts SWL at Time 2. To our knowledge, this study is the first to explore the impact of university identification on SWL over time whilst controlling for within-group contact.

Based on previous findings, we hypothesize that university identification will positively predict SWL over time. Meanwhile, due to lack of previous evidence, we have no specific predictions about whether or not SWL will predict university identification over time. Additionally, based on Sani et al.'s (2012) findings that group contact becomes a much weaker (and often non-significant) predictor of participant wellbeing when the extent of group identification is accounted for, we predict that once university identification is controlled for, extent of university student contact will have no effect on SWL over time.

## **Method**

### **Participants and Procedure**

Two-hundred and sixteen undergraduates at the University of Valencia (49 males, 167 females;  $M_{\text{age}} = 21.45$  years,  $SD = 1.26$ , range = 19-26) completed the same questionnaire twice, with a seven-month time-lag between time 1 (T1) and time 2 (T2).

Students were second, third and fourth-year undergraduates enrolled in Psychology, Social Work, and Social Education degrees. Students completed the questionnaires at the end of mandatory practical classes, meaning that all participants completed both questionnaires.

We adopted a pragmatic approach to sampling: we had access to a number of university classes that, together, contained a little over 200 students. We considered this to be an appropriate sample size to carry out the analyses we wished to conduct (e.g., see Taris, 2000). We therefore simply asked students in these classes if they wished to complete the T1 questionnaire. Informed consent was obtained, and participants received no reimbursement for participation.

### **Measures**

We measured *university identification* with the four-item Group Identification Scale (GIS; Sani et al., 2015a, e.g., “I feel a sense of belonging to my university”). To obtain the Spanish version of the scale, the original English items were translated and then back-translated in order to avoid possible mistranslations. Respondents specified their agreement with each item using a scale ranging from 1 (“Totally disagree”) to 7 (“Totally agree”). The items were averaged to create an overall measure at T1 ( $\alpha = .83$ ) and an overall measure at T2 ( $\alpha = .87$ ).

We assessed *university contact* with three questions. Two questions asked about the typical number of university students with whom the respondent has a face-to-face conversation each day (first question), and the typical number of university students with whom the respondent has a telephone conversation each day (second question). The third question concerned the number of university-related social events (e.g., parties, sport events) in which the respondent takes part in an average week. Answers for these three questions were converted into Z-scores then summed, forming an overall score at T1 and an overall

score at T2 (alphas are not reported since these items were not intended to tap the same construct). This measure was adopted from Sani et al. (2012) and Sani et al. (2015a).

We measured *Satisfaction with life* (SWL) with the Spanish version of Diener et al.'s (1985) scale, which was adapted and validated by Atienza, Pons, Balaguer, and García-Merita (2000), and shows excellent psychometric properties. Participants rated their agreement with each of the five statements (e.g., "In most ways my life is close to ideal") using a seven-point scale (1 = "Totally disagree", 7 = "Totally agree"). Each participant's mean score on the five items was obtained to create an overall measure at T1 ( $\alpha = .84$ ) and an overall measure at T2 ( $\alpha = .88$ ).

Finally, participants were asked to specify their *age* and *gender* (female = 0, male = 1).

## Results

### Overview of Analyses

After presenting descriptive statistics and their inter-correlations, we explored the mean differences between the T1 and T2 variables with repeated-measured *t*-tests. Since we conducted three *t*-tests for this specific analysis, we used a Bonferroni-corrected alpha of  $p < .016$  (i.e.,  $.05/3$ ). Since a *t*-test comparing two measures with means of 0 each will always be non-significant, we conducted separate repeated measures *t*-tests to compare participants' T1 and T2 scores for each of the three unstandardized contact items (rather than comparing participants' T1 and T2 scores for the single contact measure comprised of the three standardized versions of these items). Finally, we tested our predictions in a cross-lagged panel model using AMOS 20.0 software (Arbuckle, 2011). This allowed us to investigate the extent to which the T1 variables predicted the T2 variables while controlling for the baseline values of the T1 variables (Kearney, 2017). In order to meet statistical assumptions, this analysis only included participants with no missing data ( $n = 210$ ). University student contact

items were re-standardized after removing the six cases with missing data. All reported regression weights are standardized, and all reported confidence intervals (CIs) for regression weights are 95%.

### **Descriptive Statistics**

Table 1 shows the means, standard deviations, and inter-correlations for all variables. As expected, there were statistically significant positive correlations between T1 and T2 university identification, between T1 and T2 university contact, and between T1 and T2 SWL ( $ps < .001$ ). In addition, university identification T1 was correlated positively with SWL T1 and with SWL T2 ( $ps < .032$ ), while university identification T2 was correlated positively with SWL T2 ( $p = .013$ ). Only one of the correlations between university contact and SWL was significant (that between university contact T2 and SWL T2,  $p = .047$ ). Being female was significantly associated with greater university identification at T1 ( $p = .048$ ) and greater SWL at both T1 and T2 ( $ps = .019$  and  $.011$  respectively). Age did not correlate with any variable. Finally, T1 university identification correlated with T1 and T2 university contact ( $ps < .008$ ), while T2 university identification correlated with T2 university contact ( $p = .004$ ).

#### **(TABLE 1)**

### **Mean Differences Between Variables at T1 and T2**

Repeated measures *t*-tests revealed no across-time mean differences for university identification,  $t(211) = 1.42, p = .16, d = .10$ , or SWL,  $t(213) = 1.21, p = .23, d = .00$ . Comparing participants' T1 and T2 scores for each of the three unstandardized contact items produced *p*-values of .37, .52, and .79 respectively, thus showing no change in participants' contact across time.

### **Crossed-Lagged Panel Analysis**

Our cross-lagged model included university identification T1 and T2, SWL T1 and T2, and university contact T1 and T2: see Figure 1. We chose not to include gender or age in

the model for reasons of parsimony (if gender and age are included in the model the pattern of results does not change).

### (FIGURE 1)

The analysis revealed excellent model fit, as can be expected when all possible paths (except for those between dependent variables) are included,  $\chi^2(3) = 2.83, p = .42$ ; CFI = 1.00; RMSEA = .00; 90% CI [.00, .11]; SRMR = .02. As hypothesized, university identification T1 positively predicted SWL T2 ( $\beta = .21, p < .001$ ; 95% CI [.08, .32]), but SWL T1 did not predict university identification T2 ( $\beta = .05, p = .46$ ; 95% CI [-.08, .16]). Additionally (and also as hypothesized), university student contact T1 was unrelated to SWL T2 ( $\beta = .01, p = .94$ ; 95% CI [-.11, .11]), while SWL T1 was unrelated to university student contact T2 ( $\beta = .04, p = .53$ ; 95% CI [-.15, .06]). The  $R^2$  values for SWL T2, university identification T2, and university student contact T2 were .23, .13, and .22 respectively, indicating that the T1 predictors explained 23%, 13%, and 22% of the variance in the three outcome variables respectively. There were significant positive paths between the T1 and T2 versions of each variable ( $ps < .001$ ). Overall, university identification exerted a statistically significant positive effect on SWL over time, but not vice-versa. Moreover, university student contact had no effect on SWL over time.

### Discussion

The results confirm our key hypothesis: while greater university identification leads to higher levels of SWL over time, SWL has relatively small (and non-significant) effects on university identification over time. These findings support a range of studies which have shown a positive relationship between group identification and SWL (e.g., Cruwys et al., 2015; Greenaway et al., 2015; Haslam et al., 2005; Iyer et al., 2009; Sani et al., 2012; Wakefield et al., 2017). However, the present study expands upon these findings by exploring the relationship longitudinally (with the link between T1 identification and T2 SWL being

examined whilst controlling for T1 SWL), and showing that there was no reciprocal causality (i.e., T1 SWL did not impact upon T2 identification).

Our secondary hypothesis was also supported: there was no effect of university student contact on SWL over time. These results support Sani et al.'s (2012) and Wakefield et al.'s (2017) cross-sectional findings indicating that SWL is more strongly related to group identification than to group contact. Indeed, T1 university student contact had almost no relationship with T2 SWL in the present study: a finding which supports Haslam et al.'s (2011) conclusions about the qualitative difference between social integration and social identification. While contact with fellow university students may have been perceived in positive terms by some participants, other participants may have perceived the same contact much more negatively, which presumably may have led to intra-group contact ultimately becoming non-predictive of SWL.

### **Limitations and Future Directions**

Our study is not without limitations. Regarding our analyses, it is important to remember that although cross-lagged panel designs do consider the temporal sequence of the variables under study, causal inferences should be drawn with caution (e.g., Selig & Little, 2012). We also could have controlled for more potential extraneous variables (see, for example, Greenaway et al., 2015, who controlled for the effect of self-esteem, depression, and perceived personal control when exploring the relationship between student identification and satisfaction with life). Additionally, it is important to remember that observed variables may be subject to measurement error which is not accounted for in a cross-lagged panel model with manifest variables as used in this study.

Another key limitation is that the present study does not explore variables that may mediate the relationship between T1 university identification and T2 SWL. Social identity

researchers have explored a number of possible processes through which group identification may impact upon wellbeing, such as identification enhancing perceived personal control (Greenaway et al., 2015), satisfying core psychological needs (Greenaway, Cruwys, Haslam, & Jetten, 2016), encouraging one to believe that useful social support will be available during stressful life events (Haslam, Jetten, Postmes, & Haslam, 2009), and encouraging one to behave more healthily (Miller, Wakefield, & Sani, 2016; Sani et al., 2015a). These processes are unlikely to be mutually exclusive, and future work should do more to explore the extent to which these (and other) processes mediate the link between group identification and SWL.

However, an important caveat to this point (and to the results of the present study) is highlighted by Cruwys and Gunaseelan (2016), who explore a context within which group identification might lead to low levels of SWL: when the group identity in question relates to mental illness. Recruiting individuals diagnosed with depression, the authors found that those who had personal experience of discrimination due to their illness experienced lower levels of SWL, and the link between these variables was mediated by the extent to which participants identified as depressed. This relationship was particularly strong for participants who believed that depression symptoms (e.g., thinking repetitive negative thoughts, or self-harming) characterised people with depression. Thus, while work by researchers such as Outten and Schmitt (2015) shows that identifying with stigmatized identities (e.g., minority ethnic groups) can enhance SWL through the knowledge that the group's members can work together to better the group's position, Cruwys and Gunaseelan's (2016) findings suggest that mental illness identities may be one instance where this positive relationship does not hold (especially for those who perceive people with mental illness in strongly negative terms). Thus, although identification with the vast majority of social groups should lead to improved SWL, we also appreciate that this is not a universal trend.

One final potential criticism of this study is that perhaps it would have been better if we had asked participants about identification with other students in their university, rather than with the university itself. Having said that, our feeling is that a group is not just about 'bodies': it often includes symbols and material structures. For instance, if a person identifies with Scotland, they are identifying with fellow Scots and with a geographical and political entity as well (Reicher & Hopkins, 2001). Moreover, two items in our Group Identification Scale refer explicitly to people: "I have a lot in common with the average member of my university" and "I am similar to the average member of my university", so we believe that our scale does explore participants' identification with people. We appreciate that it could then be argued that these two items are about the institution as a whole and the other two items are about people within the institution. However, we feel that the scale's very high reliability is testimony of the unity of institution and people, at least in terms of identification with one's university.

### **Implications**

In terms of practical implications, our findings suggest that professionals who are concerned with individuals' wellbeing (especially in an educational context, e.g., student counsellors and therapists, health practitioners at university-based doctors' surgeries, etc.) should recognise the potential benefits that social group memberships might have for their patients/clients. However, as this study has highlighted, it is not enough simply to encourage individuals to join social groups: it is crucial that the person identifies with the group in question. This could be achieved through them joining groups with which they might be especially likely to identify (e.g., groups that revolve around a topic/activity that interests the individual, or groups that share the individual's attitudes, values, or beliefs). However, it could also be achieved through encouraging the person to 'take stock' of their current and previous group memberships, and to evaluate how they might increase their identification



with the former and reconnect with the latter. Engaging in a program specifically designed for this purpose, such as Groups4Health (Haslam et al., 2016) could help achieve these goals, as could more 'everyday' actions, such as allowing the individual to make collective decisions as part of the group in question (e.g., Knight et al., 2010).

### **Conclusions**

Overall, this study adds to a growing body of research by highlighting the long-term benefits of group identification on SWL- a central component of subjective wellbeing. Although people are usually familiar with the concept of aspects such as diet and exercise affecting wellbeing, we hope that the present study encourages them to also consider the importance of something else: deep and meaningful social connections.

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Table 1

*Means and Standard Deviations for Variables at T1 and T2, and Intercorrelations*

Variable	1	2	3	4	5	6	7
1. University Identification T1 ( $M = 4.94$ ; $SD = 0.95$ )	-						
2. University Identification T2 ( $M = 4.82$ ; $SD = 1.12$ )	.35***	-					
3. University Contact T1 ( $M = 0.00$ ; $SD = 2.17$ )	.19**	.06	-				
4. University Contact T2 ( $M = 0.00$ ; $SD = 2.30$ )	.39***	.20**	.32***	-			
5. Satisfaction With Life T1 ( $M = 5.39$ ; $SD = 0.92$ )	.15*	.10	-.05	.002	-		
6. Satisfaction With Life T2 ( $M = 5.31$ ; $SD = 0.94$ )	.27***	.17*	.02	.14*	.44***	-	
7. Age T1 ( $M = 21.45$ ; $SD = 1.26$ )	-.03	-.08	.03	-.04	-.06	-.03	-
8. Gender (Female = 0; Male = 1)	-.14*	.04	-.08	.02	-.16*	-.17*	-.06

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ . N.B.: University Contact variables are summed Z-scores (hence the  $M$ s of 0.00).



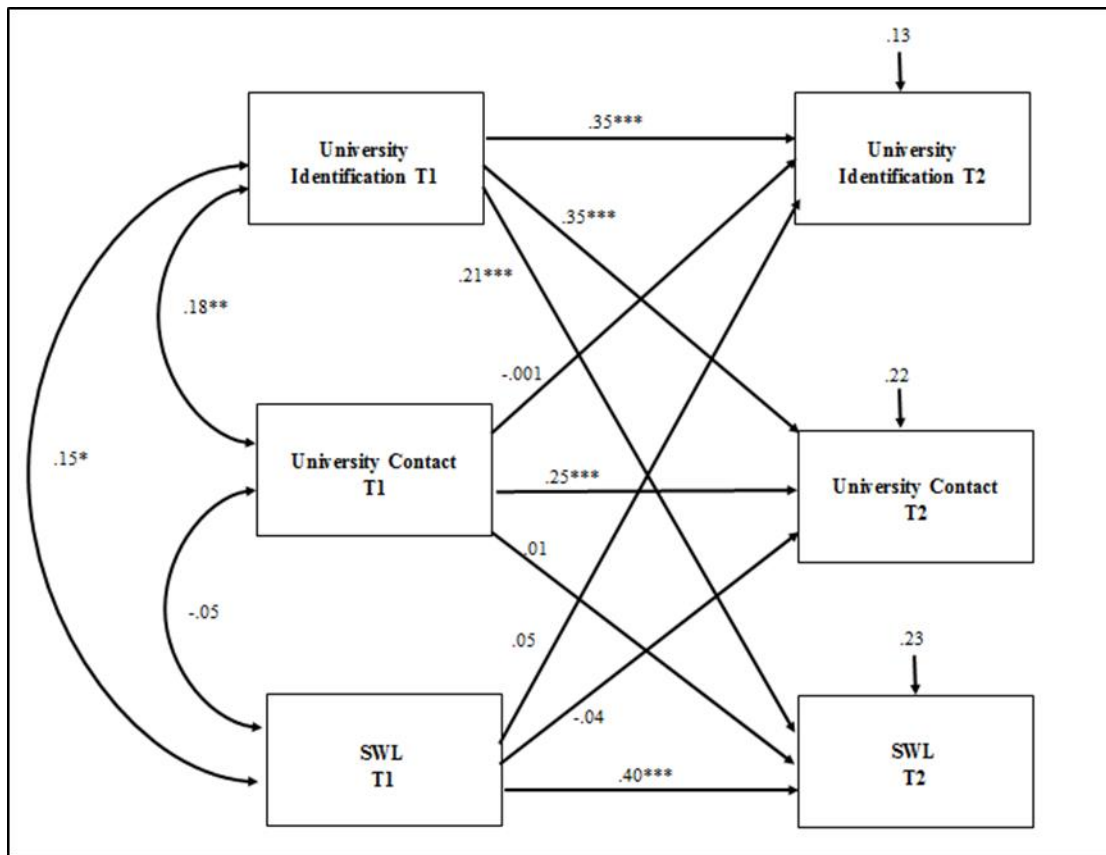


Figure 1. Cross-lagged model testing the relationship between university identification, university contact, and Satisfaction With Life over time. Path coefficients are standardized.